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UNITED STATES DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA
 SAN FRANCISCO DIVISION

IN RE OPTICAL DISK DRIVE PRODUCTS)	MDL No. 3:10-md-2143 RS
ANTITRUST LITIGATION)	
)	CLASS ACTION
)	
)	FIFTH AMENDED CLASS ACTION
)	COMPLAINT
)	
)	JURY TRIAL DEMANDED
)	
)	DATE ACTION FILED: Oct. 27, 2009

 This Document Relates to:
 ALL INDIRECT PURCHASER ACTIONS

* * * **REDACTED VERSION** * * *

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I. INTRODUCTION

1. Certain corporate Defendants (the “cooperators”) have helped the Indirect Purchaser Plaintiffs (“IPPs”) by detailing industry participants’ conspiratorial conduct that successfully stabilized optical disk drive (“ODD”) prices. These cooperating Defendants are helping IPPs in an effort to receive amnesty from the Department of Justice against criminal charges and to limit their civil liability pursuant to the Antitrust Criminal Penalty Enhancement and Report Act of 2004 (“ACPERA”). An applicant that satisfies ACPERA’s terms limits its civil liability to actual damages sustained – *i.e.*, single damages, rather than treble damages.¹ To satisfy ACPERA’s terms, the leniency applicant must provide timely and complete cooperation, including setting forth a full account of the facts known, producing all relevant documents, and making witnesses reasonably available to respond to all questions.

2. To be clear, IPPs base their claims on the object of Defendants’ conspiracy to restrain competition in the sale of optical disk drives (“ODDs”).² Defendants’ conduct indeed illegally raised ODD prices. The illegal higher prices for ODDs were in turn passed down the distribution chain, ultimately to IPPs. As a result, IPPs paid supra-competitive prices for ODDs and ODD Products sold from January 1, 2004 until at least June 30, 2009 (the “Class Period”).

3. Based on the cooperators’ information and the IPPs independent investigation, IPPs allege the following, as set forth fully in paragraphs to follow:

- **Defendants acted to stabilize prices:** Since at least 2004, Defendants coordinated their efforts to stabilize prices of ODDs. Defendants coordinated their efforts to stabilize prices by using several methods, including agreeing to the: (i) order in which competitors would finish during multi-party procurement events – such as electronic auctions – held by customers; (ii) minimum prices for ODDs, below which competitors would not quote to customers; and (iii) exchange of detailed competitive pricing information and critical intelligence about manufacturing capacity and quality issues. *See* pages 5-49, *infra*.

¹ See Pub. L. No. 108-237, § 213(b), 118 Stat. 661, 666-67 (2004).

² The ODDs that are the subject of this lawsuit include: CD-ROMS (“CD”), CD-recordable/rewritable (“CD-R/RW”), DVD-ROM (“DVD”), DVD-recordable/rewritable (DVD-R/-RW/+R/+RW), Blu-Ray (“BD”), Blu-Ray-recordable/rewritable (“BD-R”/“BD-RE”) and HD-DVD. The products containing ODDs which IPPs purchased and are the subject of this lawsuit are computers, Microsoft Xbox game consoles (all generations) and ODDs designed to be attached externally to devices such as computers (collectively “ODD Products”).

- 1 • **Defendants successfully stabilized prices:** Each of the overt acts Defendants
2 engaged in had the purpose and – in combination with the other Defendants’ overt
3 acts – effect to slow the downward pressure on the prices of ODDs, a commodity
4 product. *See* pages 49-50, *infra*.
- 5 • **Defendants stabilized ODD prices beyond HP and Dell:** Two major ODD
6 purchasers, Hewlett-Packard Company (“HP”) and Dell Computer Corporation
7 (“Dell”), had significant purchasing power. At times relevant to this lawsuit, HP and
8 Dell purchased more than 50 percent of Defendants’ ODDs that are incorporated into
9 computers sold in the United States. As a result, stabilizing the prices of ODDs
10 Defendants sold to HP and Dell (and others) helped to stabilize prices of ODDs
11 Defendants sold to other Original Equipment Manufacturers (“OEMs”) that had less
12 purchasing power. *See* pages 50-56, *infra*.
- 13 • **ODD prices stabilized compared to other industries:** Economic evidence will show
14 the Defendants’ illegal conduct stabilized the prices of ODDs, using comparative
15 industries as benchmarks. *See* pages 56-60, *infra*.
- 16 • **ODD industry structure was conducive to Defendants’ conspiracy:** The ODD
17 industry is characterized by several attributes that makes coordinated efforts to
18 stabilize prices more likely (and effective). For example, the ODD industry went from
19 unconcentrated to concentrated as defined by the Department of Justice’s merger
20 guidelines. Further, although ODDs are commodity products, intellectual property
21 controlled by a small number of firms that have “pooled” together their patents
22 created barriers to entry and an additional avenue to exchange and monitor
23 competitive sales information. *See* pages 67-85, *infra*.
- 24 • **Defendants are recidivists:** These Defendants have previously pleaded guilty to or
25 acknowledged violating the antitrust laws. *See* pages 90-95, *infra*.

26 4. As one Defendant’s antitrust compliance policy expressly prohibited, employees
27 are “absolutely forbidden, under any circumstances, to discuss or consult with, exchange
28 information or enter into any agreement or understanding with any competitor regarding
[Defendant’s], the competitor’s, or any other competitor’s present or future prices, profit
margins, cost structures, sales dates, credit terms or other terms or conditions of sale.” But
as detailed herein, Defendants’ employees flagrantly disregarded these policies in violations of
the antitrust laws.

5. Defendants ignored their own antitrust policies when faced with vigorous price
competition for ODD sales driven by OEMs. To counter price competition, Defendants turned to
illegal methods to counterattack vendors’ efforts to put competitive pricing pressure on
Defendants’ ODD sales. As one Defendant’s employee suggests, the ODD industry needed to
cooperate to forestall a price war:

1 4. Industry Cooperation

2 If the industry cooperation is needed for the not joining auction, the best way is to use
3 broadcasting mentioning that HLDS is considering not joining auction with big PC
4 makers. (Korea, Japan, Taiwan)

5 In the PC industry, HP is also using broadcasting message that HP will focus on profit
6 than profit competition. Then, HP can deliver the message that HP doesn't want
7 bleeding price competition to Dell. This way can avoid the violation of anti-trust law,
8 too.

9 Actually, if we can talk with each supplier directly, it will be more effective, but using
10 broadcasting is better way to avoid any suspicion that suppliers negotiated.

11 6. Instead of public "signals" to thwart price competition, Defendants instead chose
12 the "more effective method" – talking directly with competitor ODD suppliers. Defendants
13 engaged in a pattern of agreeing to reduce ODD price competition in online auctions and to
14 exchange information about prices, revenues, sales volume and production plans directly from
15 other competitors' employees. The object and effect of these agreements and information
16 exchanges was to reduce competition and stabilize ODD prices.

17 7. Defendants shared the common objective to stabilize ODD prices. To achieve this
18 common objective, Defendants agreed to exchange information necessary to stabilize ODD
19 prices. Communication of competitive information about prices, revenues, unit sales and
20 production plans is anticompetitive because the only plausible effect of this type of information
21 exchange between competitors is to reduce the intensity of competition by facilitating price
22 collusion. Exchange of competitive information facilitates collusion in several ways. It assists
23 competitors in forming a united front in negotiating with customer, eliminating the need to
24 reduce prices knowing that firms will not be underbid by another rival. Recent revenue, price and
25 unit sales data enable competitors to monitor each other, thereby enabling each to ascertain more
26 reliably whether competitors are honestly reporting their prices and sales.

27 8. These comprehensive allegations, in addition to the robust economic evidence
28 supporting impact to class members, plausibly show Defendants agreed to stabilize ODD prices.

II. DESCRIPTION OF OPTICAL DISK DRIVES

9. Optical disks contain microscopic pits where data is stored. These pits are made from a crystalline metal alloy and are usually pressed into a disk in a spiral arrangement, starting at the center of the disk. Once a disk containing information is inserted into an ODD, the disk spins while a lens inside the device guides a semiconductor laser beam over the disk and a photodiode detects the light reflected from the disk's bumps and pits. The laser moves outward from the center of the disk, scanning over the disk's surface. Then the photodiode reads the light's reflection as a binary code, a series of ones and zeros that the computer translates into usable data. Changes in the intensity of the beams as the lasers hit the pits are detected and translated into electrical signals. The more pits that can be packed onto a disk, the more data a disk can store. In addition to reading disks, ODDs can write and rewrite on the disk, depending on the technology of the drive and accompanying disk.

10. When a recordable disk (e.g., CD-R, DVD-R or BD-R) is inserted into an ODD that has the ability to record data, the ODD's laser is used to selectively heat parts of the organic photosensitive dye layer on a disk, changing the reflective properties of the disk surface. Thereafter, if the disk is inserted into an ODD, the photodiode will recognize these changes as bumps and pits and read the new information on the disk.

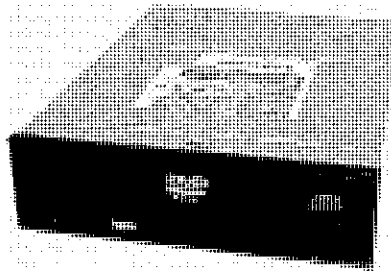
11. During part of the conspiracy period, from 2004 through 2008, more than 87 percent of the value of drives sold worldwide (on an if-sold-OEM basis) has been accounted for by DVD format drives (DVD-ROM, Combo, or DVD-RW):

DVD DRIVE SALES AS A PERCENTAGE OF TOTAL ODD SALES						
	2004	2005	2006	2007	2008	2004-2008
DVD Format Drive Sales (in \$B)	\$8.8	\$9.3	\$9.1	\$8.9	\$7.1	\$43.2
Total ODD Sales (in \$B)	\$12.2	\$10.4	\$9.6	\$9.3	\$7.9	\$49.4
DVD Sales as a % of Total ODD	72.1%	89.4%	94.8%	95.7%	89.9%	87.4%

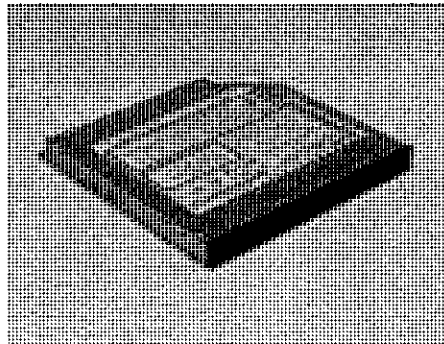
12. ODDs of all types come in both half-height and "slim" size formats. The slim size formats are easily integrated into laptop computers and mobile computing equipment, but can

also be used in desktop computers. Half-height units fit into a standard “half-height” (1.75 inch high) desktop computer bay, and are less appropriate for use in mobile equipment, where size, weight, and form factor is more important. Slim units typically trade off some degree of performance to achieve a smaller size. Both half-height and slim-size units can be integrated into external cases, as described above, by equipment manufacturers, or end users. Units incorporated into Xbox game consoles are very similar – in most cases, identical – to ODDs incorporated into computers.

13. A half-height computer optical disk typically looks something like this:



14. A slim unit computer optical disk typically looks something like this:



III. DEFENDANTS CONSPIRED TO STABILIZE ODD PRICES

A. Original Equipment Manufacturers Exerted Pricing Pressure on ODD Suppliers Through the Procurement Process

15. Historically in the ODD industry, a cooperative venture process existed which mediated supply and demand between suppliers and customers. This process then moved towards negotiated supply, where customers would negotiate directly with sales people at the Defendant companies. Then two of the largest OEMs, Dell and HP, introduced direct competitive bidding by using processes – such as electronic auctions.

1 16. Dell was one of the first OEMs to introduce electronic auctions in 2002. HP
2 introduced a similar type of electronic auction in 2004. The electronic auctions brought with
3 them increased pricing competition and significant pricing pressure. They also further
4 commoditized the ODD industry. Given the material impact of the electronic auctions on
5 Defendants' profitability, internally Defendants referred to the auctions as "bloody auctions." In
6 one Defendant's opinion, Dell's Internet auctions were "an extremely effective tool for rapidly
7 gaining price concessions in a shorter time frame than via the traditional long, drawn out multi-
8 round quote process."

9 17. HP implemented its e-Auction program in part as a reaction to the success of
10 Dell's online procurement events in decreasing the component costs for its personal computers.
11 One Defendant commented, "[i]n [the] case of ODD there is no big quality difference between
12 companies, so they are looking to have vendors compete through e-Auction for lower cost and
13 stable supply."

14 18. The electronic auctions used by Dell and HP were of two general types, e-auctions
15 and eRFQs (Electronic Requests for Quotations). E-auctions were live real-time events spanning
16 a few hours where each competing supplier submitted multiple bids. ERFQs typically spanned
17 more than one day and involved multiple rounds of bidding. During the process, the OEM
18 provided feedback to competing ODD suppliers. Typically, the OEM procurement events
19 occurred quarterly or, at most, six times a year.

20 19. These auctions did not usually result in a winner-take-all scenario, although on
21 rare occasions a sole winner did exist. Instead, awards went to multiple sources or winners; often
22 four winners, where rank determined the volume and price each bidder would supply under the
23 contract. The volume to be awarded under the contract was generally referred to as TAM, or
24 Total Available Market. TAM could be determined as a fixed number or as a target that moved
25 based on the final bidding prices.

B. Summary of Defendants' Conduct Used to Stabilize ODD Prices

1. Defendants Agreed to Exchange Sensitive Competitive Information in Furtherance of Their Objective to Stabilize Prices

20. Defendants engaged in a conspiracy to stabilize prices in the ODD market, effectuated by overt acts in furtherance thereof including agreements, and exchange of competitively sensitive information such as price, supply and capacity information, desired tier positions, prior bids and bidding outcomes, quality assessments by OEMS (which could disqualify or handicap ODD suppliers in the next procurement event), and the timing of the introduction of new products or the cessation of ones that had reached the end of their lifecycles. The purpose of these information exchanges was anticompetitive price collusion and the effect of these exchanges was to change pricing behavior.

21. Defendants' information exchanges and agreements on price and bid position were conducted and reached by sales managers, account managers or global account managers who typically reported to sales executives within each of the Defendant's respective companies.

22. Although Defendants' employees had previously exchanged confidential business information, the inception of Internet Auctions (IN Auctions) by Dell in 2002 caused Defendants to increase the intensity, frequency and specificity in their exchanges of competitive information. Defendants feared that Internet auctions would accelerate the downward price trends for ODDs.

23. By the time HP began electronic auctions and eRFQs in 2004, Defendants had in place a network of contacts at each Defendant ODD manufacturer who they could call to exchange confidential business information.

24. These exchanges of sensitive information were undertaken at the direction of the account manager's superiors. Account managers and sales directors were responsible for cultivating contacts at rival firms. They would exchange cell phone numbers (and non-business e-mail addresses in some cases) in order to maintain these contacts. These employees were required to call their counterparts at other ODD manufacturers before, during, and after many procurement events, and at other times as necessary, in order to exchange a wide variety of information on price targets, bidding strategies, expected bidding positions, production and

1 inventory data, quality problems, input shortages and the timetables for the introduction of new
2 ODD products.

3 25. The results of these repeated telephone calls were then reported to the larger sales
4 team within each Defendant. The many e-mails quoted in this complaint memorialize this
5 network of information exchanges. By reaching out to multiple contacts at rival firms, an
6 industry-wide picture could be drawn. Each Defendant would then know how it could bid on an
7 upcoming procurement event to capture its desired sales at a price above the competitive price.

8 26. These contacts were so important that when an employee switched positions, he
9 would introduce his replacement to his contacts at other firms in order to maintain the continuity
10 of information exchanges.

11 27. Conspirators also met face-to-face at times to exchange competitive information.
12 For example, co-conspirators met at: (a) a coffee shop in Austin, Texas; (b) casual dining
13 restaurants in Houston, Texas (such as T.G.I. Friday's or Bennigan's); and (c) in the lobby of one
14 conspirator's office building in Singapore, subsequently dining in the cafeteria.

15 28. Defendants engaged in hundreds of telephone and face-to-face communications
16 during their conspiracy. These communications occurred both before, during and after auction
17 events to exchange tiering, quality and pricing information.

18 29. Defendants' conspiracy inflated prices of ODDs. Before the Defendants'
19 anticompetitive conduct, the ODD market was characterized by a steep downward trend in prices,
20 frequently observed in technology markets. However, during the Class Period, the Defendants'
21 conduct reduced the rate of decline in prices – thereby stabilizing prices – in the ODD market. In
22 fact, market data indicates the effect of the conspiracy in slowing price declines was tremendous
23 – and the illegal conduct appears to have caused ODD prices to increase at certain points.

24 2. Summary of Corporate Relationships

25 30. The ODD market is characterized by incestuous relationships between competitors
26 and suppliers, facilitating the exchange of competitive information. Three unique characteristics
27 of the relationships in this industry allowed the Defendants to engage in a scheme to stabilize
28 prices and allocate the market. *First*, changes in entities and partnership memberships allowed

1 the sharing of information between competitors. For a detailed discussion of the make-up of the
2 joint ventures and industry consolidation, see pages 67-75, *supra*.

3 31. *Second*, manufacturing and supply agreements between entities allowed the
4 sharing of sensitive competitive information. Outsourced manufacturing provided
5 communication links between competitors. Each of the joint ventures includes a manufacturing
6 investor and an intellectual-property-holder investor. For example, TSST outsourced
7 manufacturing to Defendant Samsung.³ And HLDS outsourced its manufacturing to Defendant
8 LG Electronics.⁴

9 32. Competitors who also functioned as component suppliers for ODDs also allowed
10 otherwise private business information to be shared between competitors. For example, Hitachi
11 was a major supplier of OPUs (known either as optical pickup units or optical processing units),
12 and sold these parts to other manufacturers. Hitachi's supply of these component parts to its
13 competitors became an important channel for information exchange during the Class Period.

14 33. And manufacturing agreements outside of the joint ventures also provided
15 avenues for the sharing of competitive information. For example, in 2008, Teac entered into a co-
16 development agreement with PLDS to produce discrete types of ODDs, specifically several ultra
17 slim and slim slot load products.⁵

22 ³ "TSST" refers to Defendants Toshiba Samsung Storage Technology Corp. and Toshiba
23 Samsung Storage Technology Corp. Korea individually and collectively. TSST is a joint venture
between Defendants Samsung Electronics Co., Ltd. ("Samsung") and Toshiba Corp. ("Toshiba").

24 ⁴ "HLDS" refers to Defendants Hitachi-LG Data Storage, Inc. and Hitachi-LG Data
25 Storage Korea, Inc. individually and collectively. HLDS is a joint venture between Defendants
Hitachi, Ltd. ("Hitachi") and LG Electronics ("LG Electronics" or "LG").

26 ⁵ "Teac" refers to Defendants TEAC Corporation and TEAC America Inc. individually and
27 collectively. "PLDS" refers to Defendants Philips & Lite-On Digital Solutions Corp. and Philips
28 & Lite-On Digital Solutions USA, Inc. individually and collectively. PLDS is a joint venture
between Defendants Koninklijke Philips Electronics N.V. ("Philips") and Lite-On IT Corporation
("Lite-On").

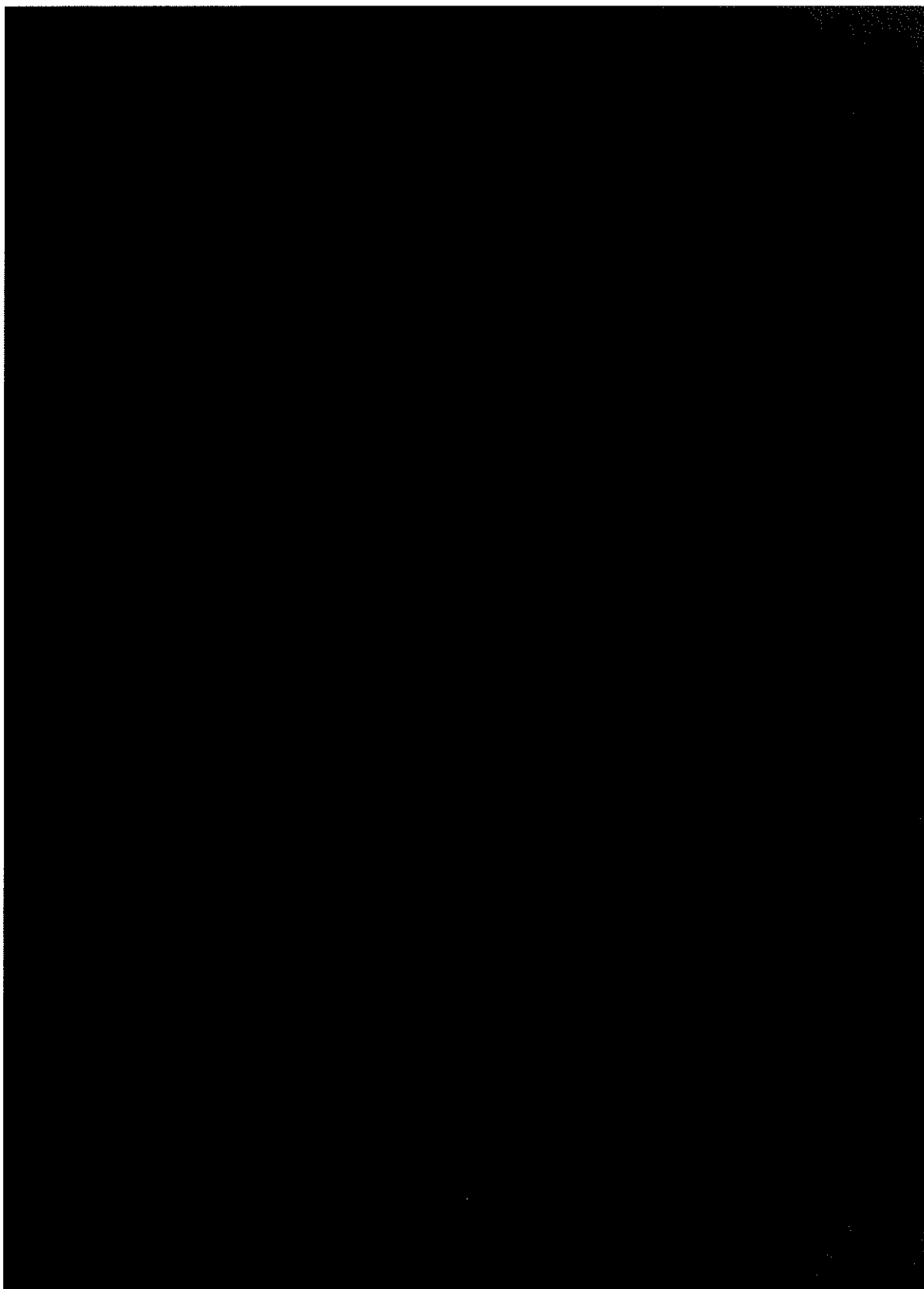
1 34. Similarly, Quanta had incestuous relationships with its co-conspirators. Former
2 employees of Lite-On founded Quanta in 1999.⁶ Originally, Quanta manufactured the ODDs for
3 the Philips-BenQ joint venture, PBDS.⁷ Currently, Quanta manufactures ODDs for Sony Optiarc.

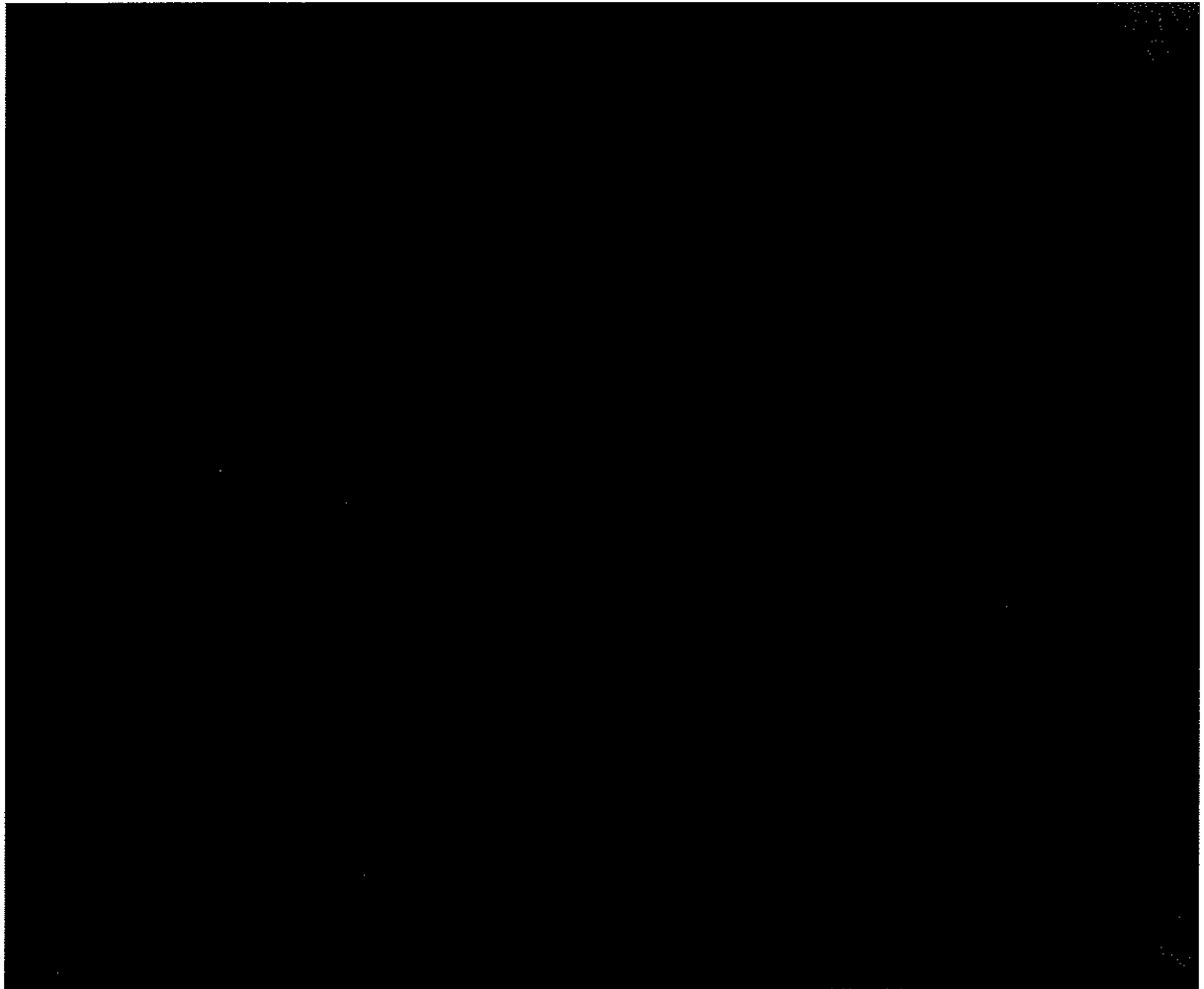
4 35. *Third*, personal relationships were developed between key employees at
5 competitor companies, forming communication links for sensitive information to be illicitly
6 shared. For example, Defendants' customers – OEMs such as Dell, HP and Acer – would host
7 customer-sponsored supply events. All the suppliers would attend these events, oftentimes with
8 the Defendants' representatives sitting at lunches together. At these customer-supply events,
9 Defendants' representatives would trade contact information for purposes of setting up future
10 information exchanges and pricing agreements.

11 **3. Summary of Key Employees Who Committed Overt Acts to Stabilize Prices**
12 **in the Representative Examples Listed in this Complaint**



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17 **4. Representative Examples of Overt Acts in Furtherance of Conspiracy to Stabilize ODD Prices**

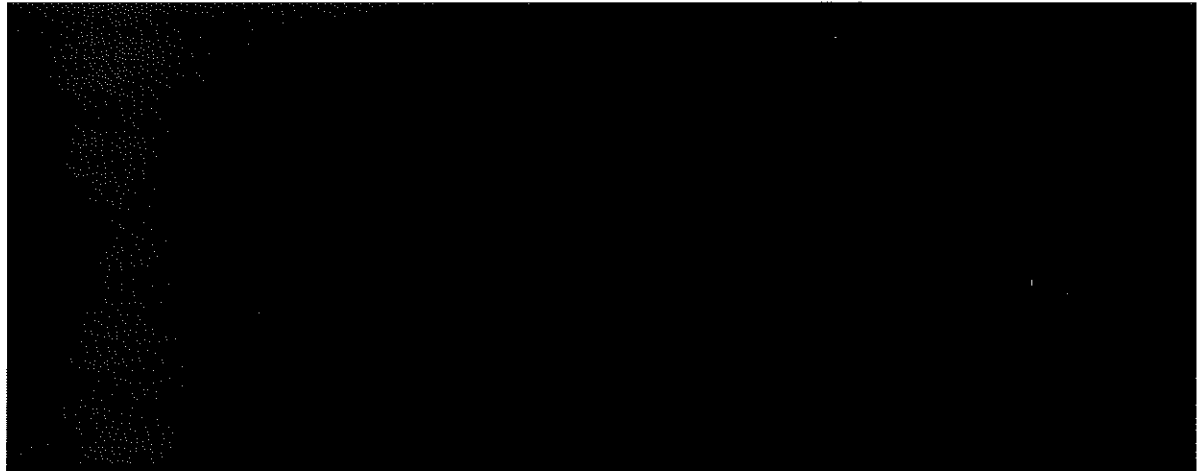
18
19 37. The following e-mails and acts are only examples of the hundreds, if not
20 thousands, of exchanges that took place between the Defendant companies in furtherance of the
21 conspiracy to stabilize ODD prices. Each of these communications reflects only a part of the
22 ongoing conspiracy, but includes the exchange of prices, supply and capacity information,
23 quality, desired tier positions, prior bids and bidding outcomes, quality assessments, timing of
24 product introductions and cessations and overt agreements. These communications were carried
25 out not only via e-mail, but also through telephone conversations and face-to-face meetings.

26 ¹¹ shinichi_nojiri@post.pioneer.co.jp.

27 ¹² kenichi_nakamura@post.pioneer.co.jp.

28 ¹³ hiro_sugawara@post.pioneer.co.jp.

¹⁴ kenjy_yokoyama@post.pioneer.co.jp.



a. Representative Acts of Hitachi, LG and HLDS in Furtherance of the Conspiracy

39. In late 2000, Japanese ODD producer Hitachi merged its ODD operations with LG Electronics, of Korea to form the joint venture Hitachi LG Data Systems (HLDS). The following paragraphs reflect the actions of this family of Defendants in exchanging pricing, supply, capacity, quality and bid positioning information with their competitors Philips, Lite-On, PLDS, Samsung, TSST, Teac, Panasonic, Sony NEC Optiarc and Quanta. The purpose and effect of agreeing to exchange this competitive business information was to stabilize ODD prices by facilitating price collusion.

40. In February 2004, Luke Choi of LG¹⁵ e-mailed HLDS employees, (including hjungchoi@hlds.co.kr), addressing them as "Dell Team." Mr. Choi relayed there would be an additional round of bidding on a Dell auction. Mr. Choi reported that "Philips, Samsung, Teac are expected not to join. During phone call with PMs on today, it is verified that they have no room for more price cutting."

41. In June 2004, Luke Choi of LG e-mailed HLDS employees regarding a Dell procurement event that was to occur the next day, reporting that he had spoken with Samsung and Samsung had proposed that the competitors alternate rankings in upcoming Dell procurement events:

¹⁵ Luke Choi, Dell account manager of LG (luke@lge.com).

1 Samsung's PM suggested as follows: Since HLDS and Samsung are only two
2 suppliers for HH Combo, HLDS takes 1st rank in one of August or September and
3 Samsung takes 1st rank in the other month. (In this case, Dell might notice it so I am
4 quite cautious about this, what about your opinion?)

5 42. In August 2004, Luke Choi of LG e-mailed the HLDS "Dell Team" regarding an
6 upcoming Dell procurement event. Mr. Choi discussed his intention to "pre-negotiate" regarding
7 the procurement event with Samsung, wherein they would agree to alternate taking first place in
8 rank. According to the e-mail, Samsung was amenable to the agreement:

9 Quantity status up to today presented to have insufficient operate quantity even if it
10 received JES material again. When you send nego point, considering the recent quantity
11 status, I will negotiate with Samsung in Monday afternoon. (Samsung's PM suggested
12 us to take 1st rank for one month and it takes 1st rank for two month in CD-RW since
13 HLDS took 1st rank all in DVD-ROM)

14 43. In May 2005, Daniel Hur of LG¹⁶ reported on an HP ODD procurement event and
15 stated that to the best of his knowledge, "only HLDS and LO are competing with each other."
16 But Mr. Hur indicated that he would "check with TSST whether it has been requested to submit
17 quotation." Within days, Mr. Hur reported that "[i]t was said that TSST had not been invited to
18 submit quotation set out below." Mr. Hur then noted that the "competition is between HLDS and
19 LO." On information and belief, LO refers to Defendant Lite-On. Mr. Hur acknowledged that he
20 had been in contact with his competitor and stated, "[u]pon checking with LO, I found out that
21 there has been quite a big price gap between LO's price and our company's price since May,
22 especially with respect to the price of CD-RW." Mr. Hur then attached a chart which detailed
23 HLDS and Lite-On's pricing for the months of May, June and July for CDRW and DVD
24 products.

25 44. In August 2005, Duha Hwang of LG¹⁷ e-mailed employees of HLDS regarding an
26 HP ODD procurement event. Hwang reported under the heading "Discussion with TSST":
"Discussed our proposal with HQ. Agrees on the overall approach but practically appears to want

27 ¹⁶ Daniel Hur, Senior OEM Account Manager at LG Electronics USA (hdaniel@lge.com).

28 ¹⁷ Duha Hwang, Product Manager for Optical Storage at LG Electronics USA.

1 to avoid the situation of being one of the two vendors who takes the hit when one vendor enters
 2 the auction first and stays with current price while other two vendors wait. . . . Planned to discuss
 3 next week after more consideration, but I doubt if any bright conclusion will come forth.”

4 45. A November 2005 e-mail from Mr. Hur of LG to a number of HLDS employees
 5 acknowledged the improper nature of the sharing of sensitive competitor information and
 6 requested that employees keep the information as secret as possible:

7 It is desirable for us to limit the recipients of data as much as possible if it is related to
 8 information exchange with competitors or information from HP IPO. I think we'd better
 9 not copy it to local employees who have different nationality and contractors. We don't
 10 need to share it with our engineers as well.

11 46. A November 2005 e-mail from Sam Kim¹⁸ of HLDS to “HLDS Management”
 12 regarding an HP ODD procurement event reported pricing coordination between HLDS and Lite-
 13 On during the auction itself:

14 2. eAuction Price

15 - After about one and half hour into the eAuction, LO called us and suggested that either
 16 HLDS come in 1st and de-commit volume so it is allocated to LO, or have LO come in
 17 1st so that LO decommits and HLDS comes in 2nd and shares the volume. LO said they
 18 would follow HLDS' opinion, so it was agreed to have LO come in 1st and decommit.
 19 The eAuction was closed at the attached price.

20 47. A May 2006 e-mail from Eugene Yang¹⁹ of HLDS to Daniel Hur of HLDS
 21 requested competitors' contact information. In response, Mr. Hur, acknowledged the illegal
 22 nature of the competitor contacts and explained to Mr. Yang that he should meet his competitors
 23 at “a place where it would be very unlikely for HP people to see you”:

24
 25
 26 ¹⁸ Sam Kim, Team Director of HLDS (ys0303@hlds.co.kr).

27 ¹⁹ Eugene Yang, Senior OEM Account Manager at LG Electronics USA
 28 (yangwoo@lge.com).

1 The PM for Lite-on is Michael Chang.

2 Michael_Chang@liteonit.com

3 Call phone number is 281-924-0629.

4 You may call Mr. Chang directly, saying you are my replacement.

5 When meeting and talking with Mr. Chang, you must choose a place where it would be
6 very unlikely for HP people to see you.

7 During the day time, I would use Jones and Starbucks on 1960, but that does not meet
8 those places are guaranteed to be safe.

9 48. In July 2006, Mr. Hur circulated a memorandum to "management level" HLDS
10 employees, including Young Keun Park (Chief Marketing Officer) and Sang Hun Kim (Team
11 Leader) requesting the development of a response to HP's use of the online auction procedures.
12 Included in the report was a "Current Status Review / Competitor & Us" along with competitor
13 information from TSST and Lite-On. The information included that "TSST won't increase the
14 price during the Auction period (Sep – Nov), and it will supply 55% of proposed quantity at the
15 Auction. . . . And based on the acquired information, TSST is passive to increase the price from
16 Dec to Feb after the Auction." Mr. Hur reported that Lite-On "won't take price-increase strategy,
17 but rather, it might act more aggressively to secure more quantity."

18 49. In August 2006, Nancy Gray of LG²⁰ reported to Eugene Yang of LG regarding
19 her "Lunch with Panasonic." Gray reported that for certain ODD products, "Panasonic is okay
20 with coming in 3rd place. As they still have a reserve of additional share, combined with the
21 auction they still consider themselves in 2nd place behind HLDS. They are okay with being
22 behind HLDS, for now anyway, as they know they cannot beat our pricing." Eugene Yang
23 forwarded this e-mail to HLDS's Chief Marketing Officer, Young Keun Park, and Daniel Hur
24 among others, explaining Gray's e-mail and stating that Gray "has personal meeting with Amy
25 about once a month because Nancy had working experience in Panasonic before." Mr. Yang then
26 confirmed that he himself had "checked Panasonic's internal evaluation about Auction,"
27 presumably from his own sources. Mr. Hur responded with the request that Mr. Yang "kindly
28 keep updating competition status" from Panasonic and Lite-On.

²⁰ Nancy Gray, Account Coordinator at LG Electronics USA.

1 50. In January 2007, Jedy Lee²¹ of LG e-mailed HLDS employees,²² regarding a
 2 January 31, 2007, Lenovo auction. Lee stated that he/she "got phone call [from] Lite-on local
 3 representatives who covers both sales and engineering stuffs . . . and got surprising news about
 4 Lite-on during discussion [sic]." Lee went on to report that the relationship between "Lite-on an
 5 Lenovo looks very bad due to some DVD price issue and couple of engineering items which are
 6 very important to Lenovo" Lee then reported the exchange of pricing information with Lite-
 7 On's regarding sales to Lenovo:

- 8 ① Lite-on HH DVD price for 4Q
- 9 - Originally, Lite-on "verbally" offered good pricing when they started price negotiation in Dec
 - 10 But, actually, they offered highest pricing.
 - 11 - Background is kind of conflict between Lite-on sales and finance team against price
 - 12 strategy for Lenovo.
 - 13 - Lite-on sales team tried to secure largest share with lowest price, but Lite-on finance team
 - 14 tackled sales side. According to Lite-on local manager, Lite-on finance team complained that
 - 15 as HH DVD cost already reached to limit margin in 4Q, if Lite-on goes with additional big update
 - 16 of cost, then, deficit level would be too big...
 - 17 - Then after some inside debating and challenge from Lenovo, Lite-on finally made quotation
 - 18 slightly higher than HLDS and Helen is unhappy with Lite-on's DVD pricing. No idea of Lite-on's final
 - 19 pricing for 1Q yet.
 - 20 -> Lite-on local manager commented that situation would be the same and Lite-on can not be
 - 21 aggressive in even auction for the time being.
 - 22 -> I saw Ivan's score card review for Lite-on (unofficially— 겹쳐해서 보고 갔다놓음). In cost
 - 23 category for Lite-on, comment is "Lite-on was doing worst in HH DVD price negotiation."

24 In response, and in preparation for the January 30, 2007, Lenovo auction, Mr. Park of HLDS
 25 stated: "Please try to minimize the cost drop and also try to maintain the gap between SATA &
 26 PATA, considering competitors' offering."

27 51. In October 2007, Hyun Chul Son (hcsn@hitachi.com.tw) reported to a number of
 28 HLDS employees, **including** Daniel Hur and Eugene Wang: "I've checked it through Freddie,
 SNO's [Sony NEC Optiarc's] DVD-ROM isn't supported from Lite-on. This model is produced
 by Foxconn as OEM and supply to SNO." On information and belief, the Freddie referred to by
 Mr. Son is Freddie Hsieh of Lite-On/PLDS.

²¹ Jedy Lee, Senior Account Manager of LG Electronics USA.

²² Including Young Keun Park of HLDS (ykp@hlds.co.kr).

1 52. In January 2008, Eugene Yang reported to the HLDS "HP Account" that although
2 HLDS had been excluded from the upcoming HP ODD procurement event, HLDS had disclosed
3 this information to its competitors, PLDS and TSST, to persuade these competitors not to lower
4 their price:

5 The RFQ for SATA DVD-ROM, which had been conducted for 2 rounds, was
6 completed yesterday this time.

7 But both T* and P* didn't get any comments on ranking or volume, but received a
8 proposal for a face-to-face negotiation on Wednesday.

9 Houston office, although it may have some potential risks, has released to T* and P* the
10 information that HLDS would not be participating and the information on other
11 competitors, and has persuaded them that they need not lower their price since the 2
12 companies would gain major volume regardless of price.

13 53. In October 2008, Eugene Yang of LG e-mailed employees of HLDS proposing
14 pricing for an upcoming HP ODD procurement event, based on "a thorough confirmation [of] the
15 current status of our competitors." Yang then reported sensitive information regarding HLDS's
16 competitors PLDS, Sony NEC Optiar, Quanta and TSST, including the following details
17 regarding PLDS:

18 1) PLDS

19 It is targeting for 1st or 2nd place, and it is currently estimating a 30% Share acquisition
20 as its Min level.

21 It has not yet settled on a price standard and hopes that the price will be determined at a
22 reasonable level. However, it is trying to secure more than 30% of the Shares even if it
23 has to go through a second round of negotiations with Edward again.

24 54. In February 2009, internal e-mails again acknowledged that the competitor
25 contacts were improper given government investigations in other industries, but then counseled
26 employees to simply keep these contacts out of documents or e-mails:
27
28

1 From: kimsanghun [kimsanghun@hlds.co.kr]
 2 Sent: Tuesday, February 17, 2009 9:43 AM
 3 To: Jason Kim; 'Kim Young Sam'; Yang Woo Jin; James Park
 4 Cc: Daniel Hur; BeumSeock; Min So Jung
 5 Subject RE: : Competitor contact

6 Recently in the USA & EU, investigations on collusion between suppliers are being
 7 strengthened. LG TV & LGD are under the investigation as a close example. I guess
 8 other industries also know this thru news or something. With competitor, especially T
 9 company, we need to be extremely careful about contacts, and let's be careful so that
 10 there are not should in documents / email. (since the share of T and us combined
 11 becomes more than 50%, there is a chance that the issue will grow even bigger).
 12 Recently, HE President and CEO emphasized this again.

13 On information and belief, the "T" referred to in the above e-mail is TSST.

14 55. In March 2009, Daniel Hur²³ of HLDS e-mailed Eugene Yang of LG among
 15 others encouraging his colleagues to further mask their competitive contacts:

16 I would like to suggest using phones where only out-going calls can be made instead of
 17 our cell phones that we use for business purposes in order to avoid any unnecessary
 18 misunderstanding or misapprehension when gathering market intelligence.

19 **b. Representative Acts of the Panasonic Defendants in Furtherance of**
 20 **the Conspiracy**

21 56. The following paragraphs reflect the Panasonic Defendants' exchange of pricing,
 22 supply, capacity, quality and bid positioning information with their competitors LG Electronics,
 23 HLDS, Sony Optiarc, Pioneer, HLDS, TSST and Quanta. The purpose and effect of agreeing to
 24 exchange this competitive business information was to stabilize ODD prices by facilitating price
 25 collusion.

26 57. In October 2005, Amy Salter²⁴ of Panasonic e-mailed Nancy Gray of LG with the
 27 month-to-date pull rate²⁵ on 12.7 Combo drives and 12.7 DVD ROM drives of Panasonic, Teac,

28 ²³ At this time, Mr. Hur's e-mail address was hdaniel@hldsgw.com.

²⁴ Amy Salter, Account Representative of Panasonic (SalterA@us.panasonic.com).

1 Sony/Lite-On, and TSST. Ms. Salter then informed Ms. Gray that she was welcome to the
2 information, but “[y]ou didnt [sic] get that from me!”

3 58. In April 2006, Amy Salter of Panasonic sent an e-mail to Steve Hamlin²⁶ and
4 Yoshihiro Takada²⁷ of Panasonic reporting a “summary of meeting with Nancy” from HLDS.
5 Ms. Salter reported detailed pricing and production information regarding ODDs, including:

6 I met Nancy for lunch today to get her idea of HLDS 9.5 strategy.
7 HLDS is not planning to increase 9.5 demand unless a customer
8 specifically requests it. In other words, they are not promoting it.
9 They are happy to be in a supporting role for 2006-07. They have
10 promised Hp they will be competitive to Panasonic for 9.5 but they
11 have not offered best price yet. They seem to be ok matching our
12 9.5 combo prices but not quite there for DVD RW. They will
13 continue to increase their 12.7 production since they feel this is
14 going to be the standard for the next several years. Hp Consumer
15 division is struggling with tight margins so they do not expect
16 Consumer to jump on the 9.5 bandwagon anytime soon. The only
17 way Consumer will accept this type of proposal is to get the
18 guarantee of price parity but continued price aggressiveness. HLDS
19 is planning on the 12.7 combo drive to be low \$20 range by end of
20 this year and 12.7 DVD RW to be around \$39-\$40. HLDS has
21 forecasted and budgeted for continued 12.7 price drops. They are
22 more worried about 12.7 competition with QSI and TSST. Nancy
23 mentioned that the attention previously given to Panasonic has
24 shifted to QSI and TSST. HLDS provides for Consumer and
25 Commercial 12.7 platforms so their level of business will be high
26 without 9.5. At this point, they consider 9.5 business a bonus but
27 one that could be easily supported with 12.7.

28 59. In February 2007, Amy Salter of Panasonic sent to Nancy Gray of HLDS an
internal report that Salter used “to update [her] feasibility reports for Marketing.” The report was
to be used “to see who is making what and how much.”

60. In February 2007, Yoshihiro Takada of Panasonic e-mailed Amy Salter of
Panasonic providing information regarding Panasonic’s ODD products as well as information
from competitors:

25 ²⁵ A pull rate refers to the usage of a customer (for example Dell or HP) which was actually
pulled against the expected volume of ODDs.

26 ²⁶ Steve Hamlin, Group Sales Manager of Panasonic Industrial Company
(HamlinS@us.panasonic.com).

27 ²⁷ Yoshihiro Takada, Business Development Manager, Panasonic
(takada.yoshihiro@jp.panasonic.com).

As I explained today, NEC(Optiarc) is the only supplier who fully support LF for both Slim and HH. But as you can see, volume of slim LF is pretty small right now. (Pioneer seems capable for slim drive in the future. I did not know Teac can support LF. But I can imagine their drive with LF will be bull xxxx.)

1. PCC is under feasibility study right now based on Toshiba's request. Rut according to development engineer, it is much easier than LS support and Royalty cost is also cheaper than LS.

2. Toshiba PC div already anounced [sic] a couple month ago and Acer also start considering LF since last month. (May be Dell will think about LF.)

3. TSST is also start considering to support LF in the future.

Mr. Takada then specifically indicated that Ms. Salter could "send this information to Nancy [Gray at HLDS] to support her summary." Ms. Salter did exactly this, with the question "Are you guys about to support Dell slim BD? We currently support slim BD at Dell but they are threatening us with our competitor. Is it HLDS?" The next day Ms. Salter responded with "arigato!" to Mr. Takada, and the comment that she "couldn't get 100% confirmation about Dell, but I'm pretty sure it's us."

61. In March 2007, Amy Salter of Panasonic e-mailed Nancy Gray of HLDS stating:

How did you do in the final auction? We down [sic] to maybe 20K shipments in April and May since we lost. I am struggling now with how to even compete in June. I don't think we are going to be a factor in the June RFQ since we couldn't even make it below \$33 for April/May. We are using the same drive model for all three quotes so I don't think we can make it.

Ms. Gray from HLDS responded: "We ranked 4th in the auction, but we still anticipate having a large share."

62. In an e-mail approximately a week later in March 2007, Amy Salter reported to Yoshihiro Takada and Steve Hamlin that she had met with Nancy Gray of HLDS and exchanged further competitor information, including from both HLDS and Sony Optiarc:

I talked with Nancy yesterday regarding June RFQ.

HLDS has been given funding to quote below \$32 for June. Nancy indicated they could go as low as \$31.70. HLDS does not want to quote this low price but will have to do it if the other companies go below \$32. Nancy had lunch with Phoebe (QSI/OPTIARC account manager). It looks like Optiarc can quote \$31.50 in June. Optiarc strategy is get #1 price to show ability to Hp and build confidence.

Optiarc is aware they may not get largest TAM but their point 1 H07 is show #1 price. Optiarc plans to push for more volume in 2H07 once they have Hp confidence in price and supply area.

Based on their discussions and Eugene insider information, HLDS believes the auction result could be as below.

HLDS June auction result prediction

1. Optiarc \$31.50
2. TSST \$31.60-31.70
3. HLDS \$31.70 (HLDS could end of #3 or #4 position it depends on Pioneer ability)
4. Pioneer \$31.70-31.80
5. Panasonic or PBDS at \$32

63. In March 2007, Yoshihiro Takada of Panasonic summarized his meetings with competitor Pioneer, where Mr. Takada confirmed with Pioneer that "they [would] quote really aggressive [sic] price in Apr-May, but will slow down in June based on June price."

64. In a May 2008 e-mail, Panasonic employees discussed the need to provide their "spies" of competitive information on Blu Ray products with expense money:

From: Snover, Richard <SnoverR@us.panasonic.com>
Sent: Tuesday, May 27, 2008 12:53 PM
To: Martinez, David <MartinezD@us.panasonic.com>
Subject: spy expense

David,

PCC/OS1 has requested that I investigate HLDS Blu Ray pricing so they can re-submit their Blu Ray RFQ. Plus they are requesting that I find out more about the Lenovo buy out of IBM Xserver(?).

Spies need lunch and or golf money. How do you want to work this entertainment request?

Richard Snover
 Application Engineer
 919-544-8742

PS From the book "Art of War" . The most valueable person in a Army is not the generals, its their spies...

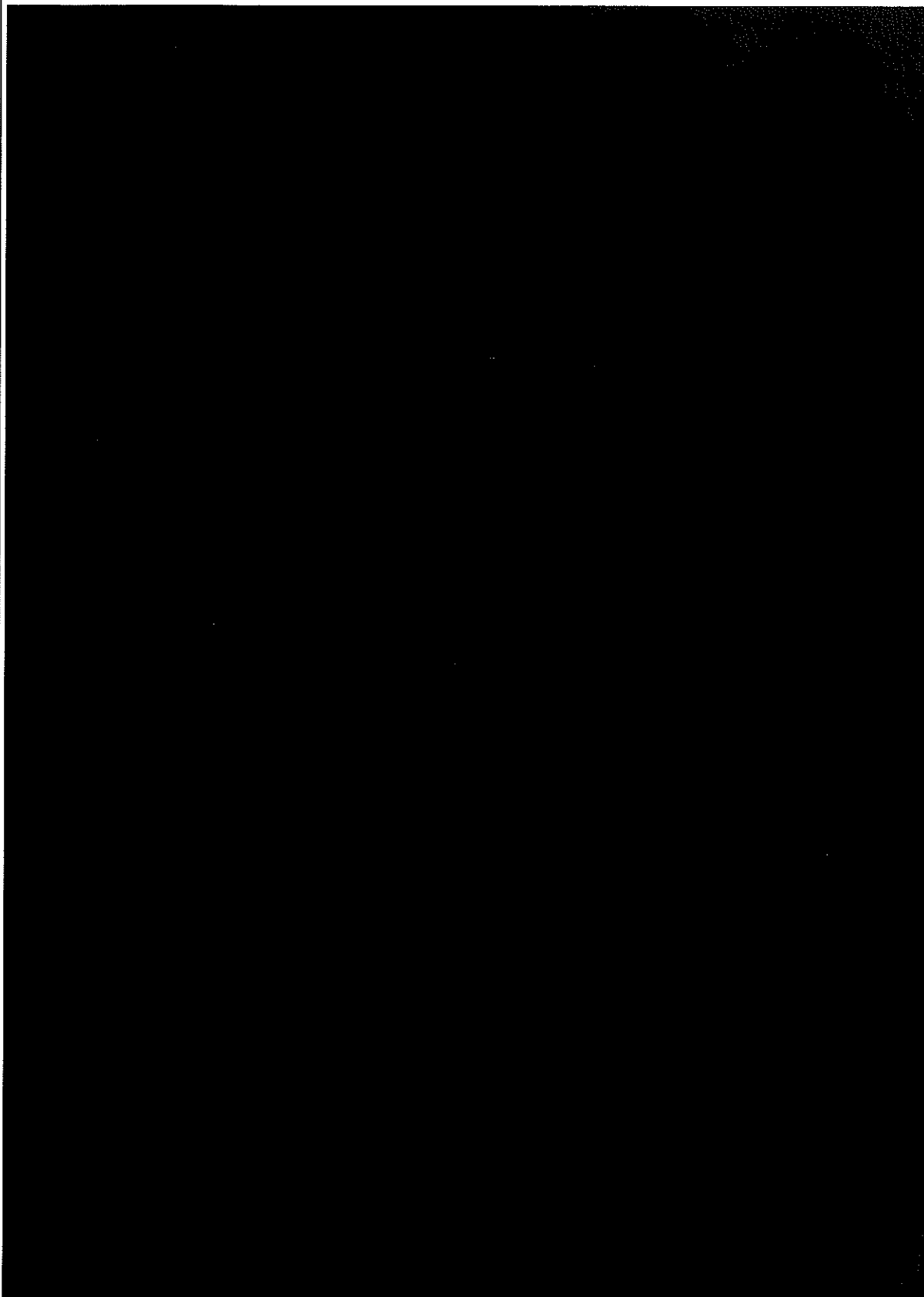
65. In March-April 2009, Yoshihiro Takada of Panasonic requested that Amy Salter of Panasonic collected "as much [information] as possible" from Panasonic's competitors. Salter then gathered and relayed information from competitors HLDS, TSST and Quanta. Included amongst the information exchanged was:

- 1 • **HLDS:** Amy Salter writes, "Eugene is not motivated to hurry price reductions or
2 focus on next generation models. HLDS has inventory and 12k deal with Edward last
3 year was a complete failure so Eugene does not want to make any deals for price or
4 quantity." and "I received an email tonight from Nancy regarding LS support for next
5 generation SDRW and 9.5. HLDS can do both from next generation" and "I will have
6 lunch on Monday with Nancy so we can close any questions you have about above
7 comments."
- 8 • **TSST:** "Based on SMD price trends, Kenny needs to stay \$22 or higher through 2009.
9 Since Panasonic, Pioneer and PLDS are gone from SMD business, he does not believe
10 he will have to be extremely aggressive to keep his share. He seems confident TSST
11 will have 45% share through 1.5C. Due to price down requests, Kenny (TSST) hopes
12 price reduction for SMD will take place again after 2C. If Hp requires price reduction
13 in 2C, it will be minor."
- 14 • **Quanta/QSI:** "QSI will be able to support LS SMD version but schedule timing may
15 be undecided until partnership aligned." and "Currently QSI is supporting the
16 following models: 12.7 SMD, 12.7 DVD-ROM SATA, 12.7 Combo SATA, 9.5
17 SATA SMD (Caroline at QSI is handling)."

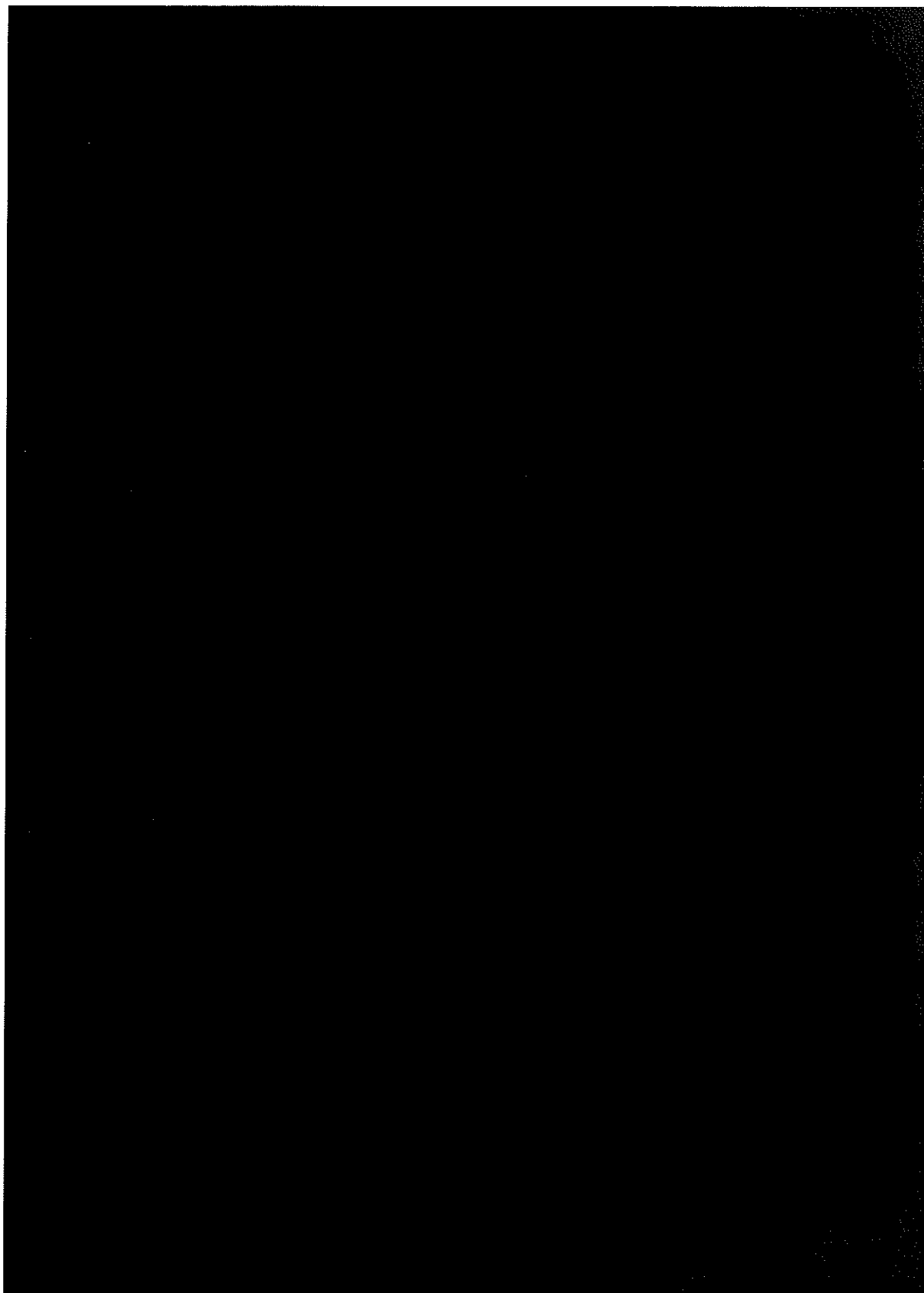
18 **c. Representative Acts of Philips, Lite-On, BenQ, PBDS and PLDS in**
19 **Furtherance of the Conspiracy**

20 66. In early 2003 Defendants BenQ and Philips formed a joint venture, Philips BenQ
21 Digital Storage (PBDS). In early 2006, Taiwanese ODD producer Lite-On purchased BenQ's
22 ODD production facilities in China, and took over BenQ's manufacturing ties to PBDS. In 2007,
23 BenQ sold its interest in PBDS to Lite-On and the joint venture was renamed Philips Lite-On
24 Digital Storage (PLDS). The following paragraphs reflect this family of Defendants' exchange of
25 pricing, supply, capacity, quality and bid positioning information with each other (prior to their
26 joint ventures) and their competitors HLDS, TSST, Sony Optiarc, and Panasonic. The purpose
27 and effect of agreeing to exchange this competitive business information was to stabilize ODD
28 prices by facilitating price collusion.

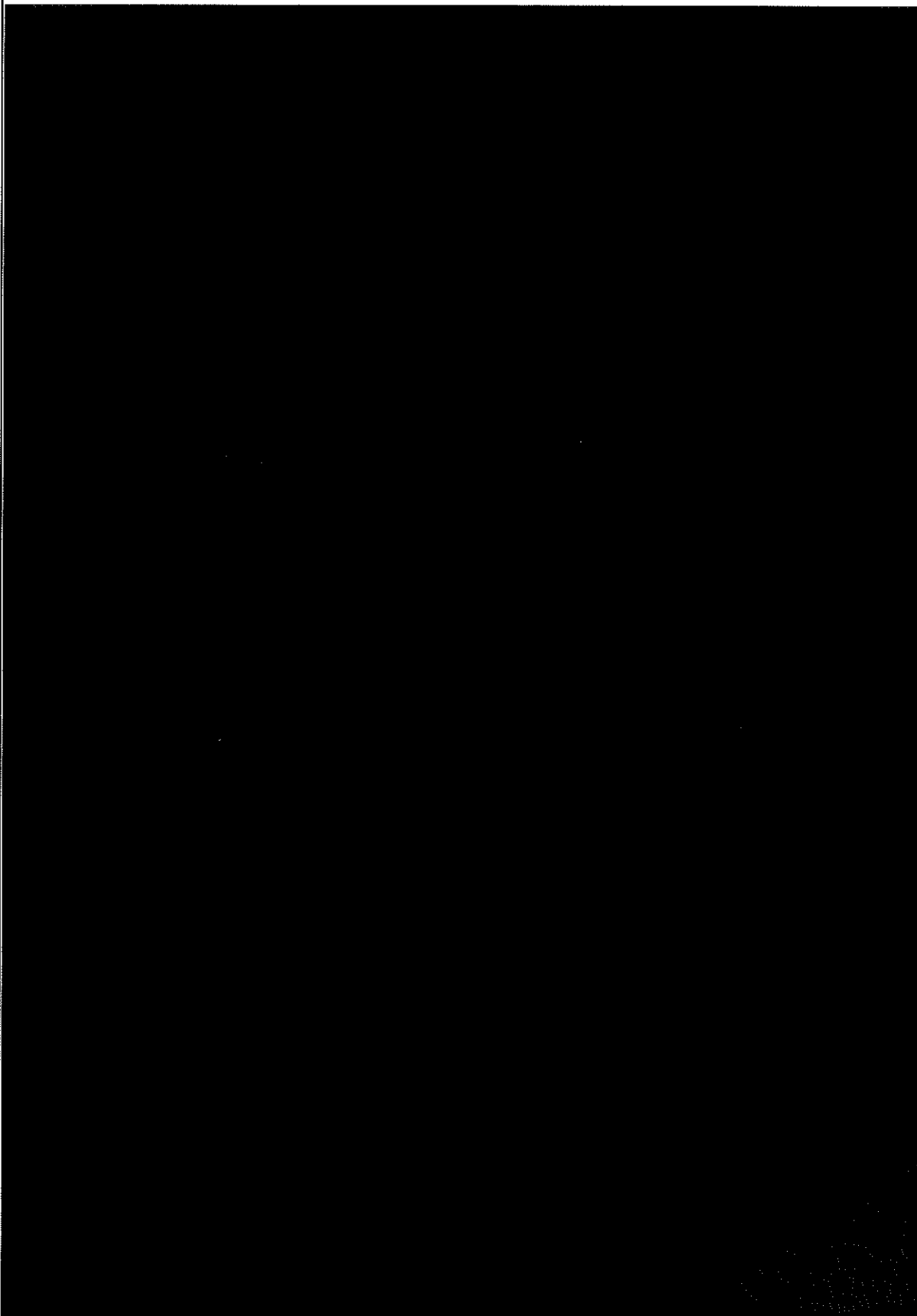
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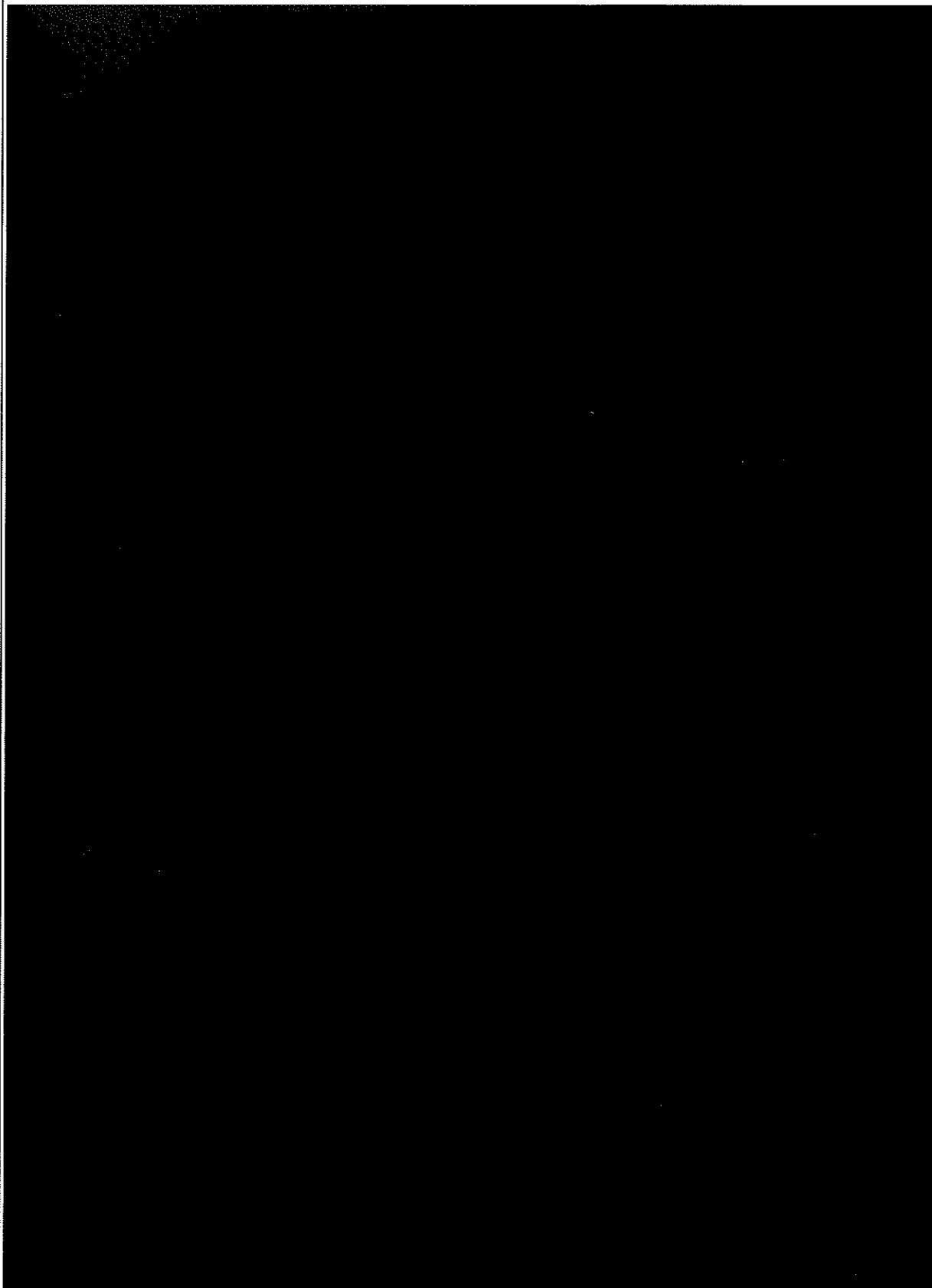
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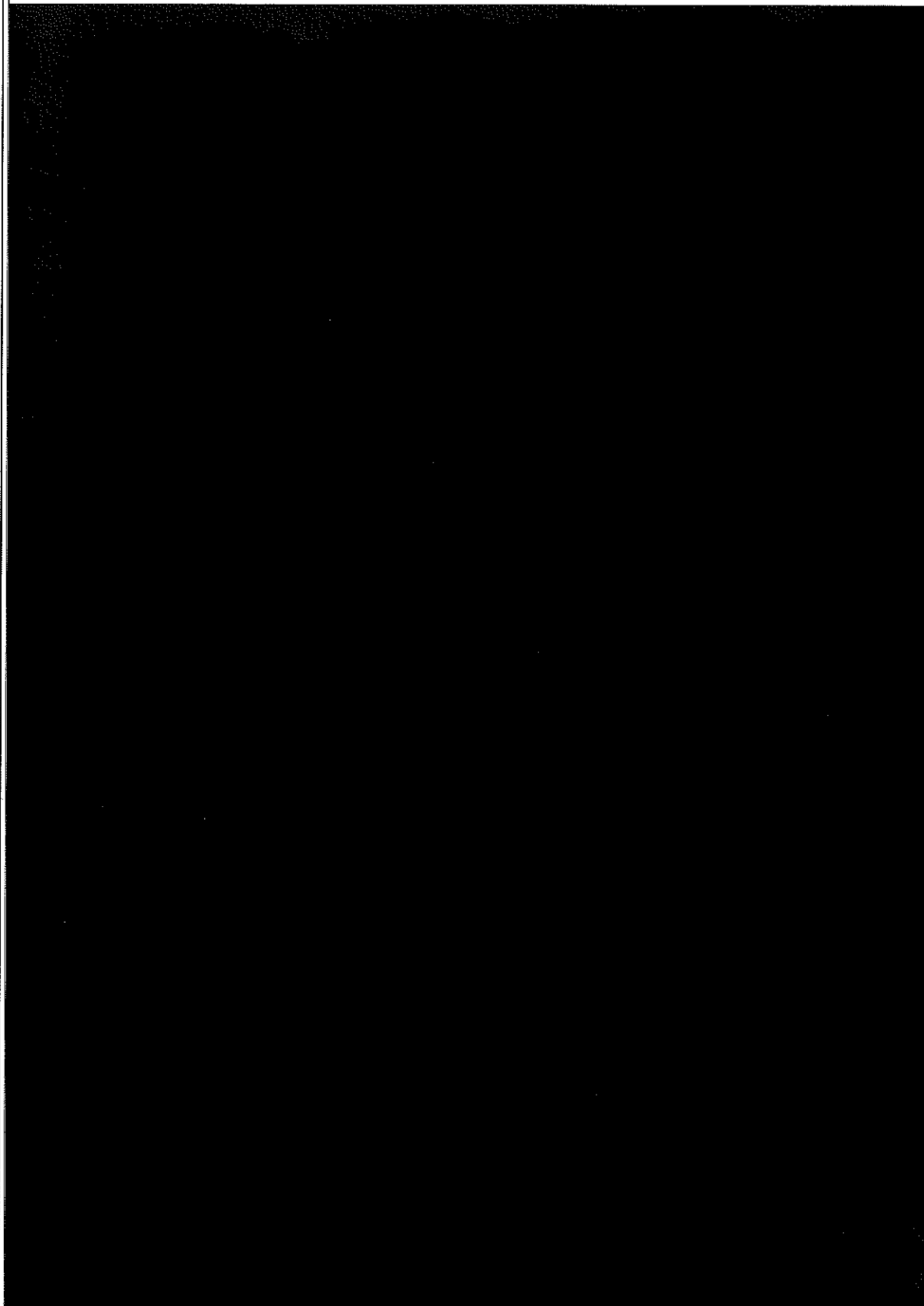
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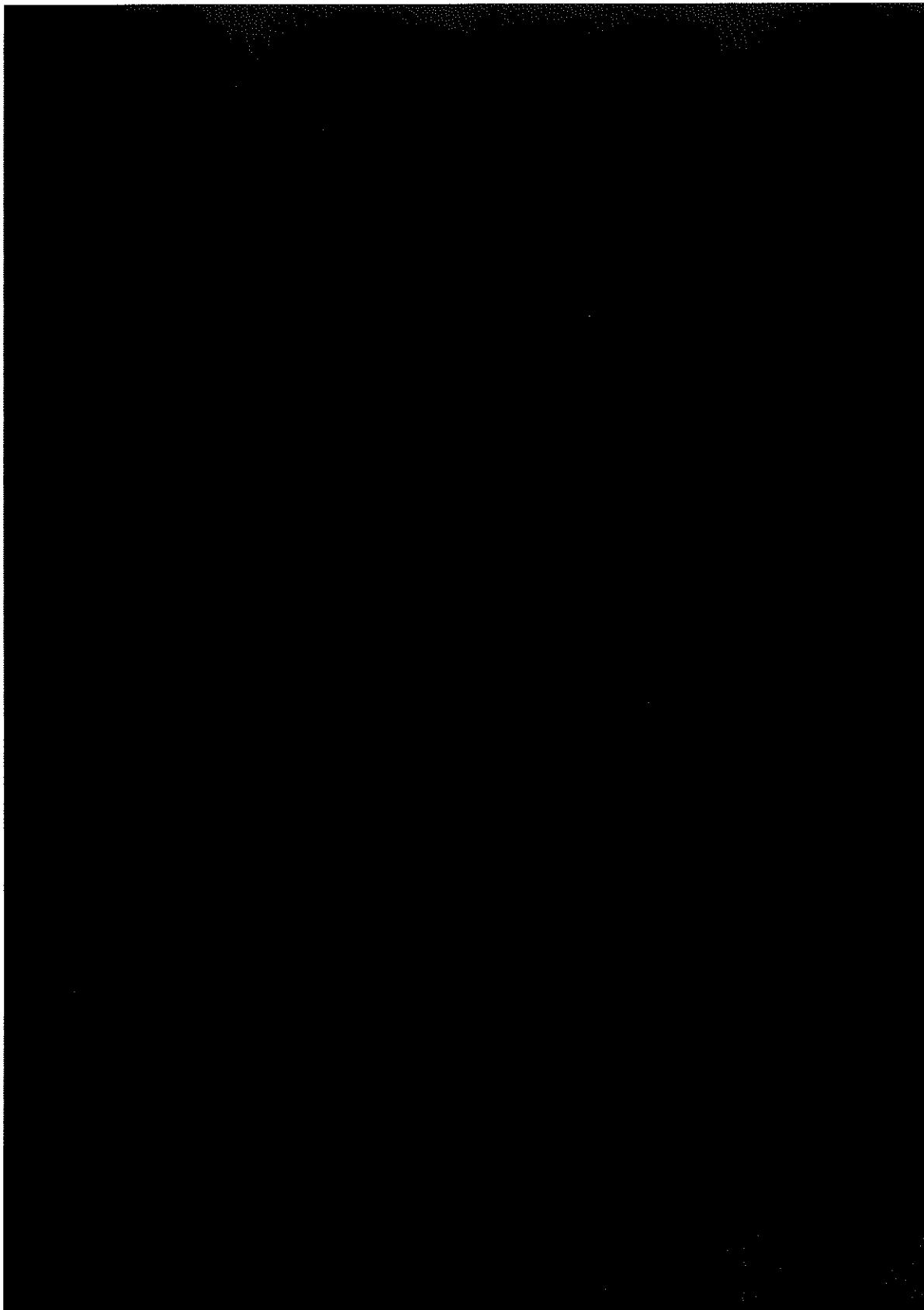
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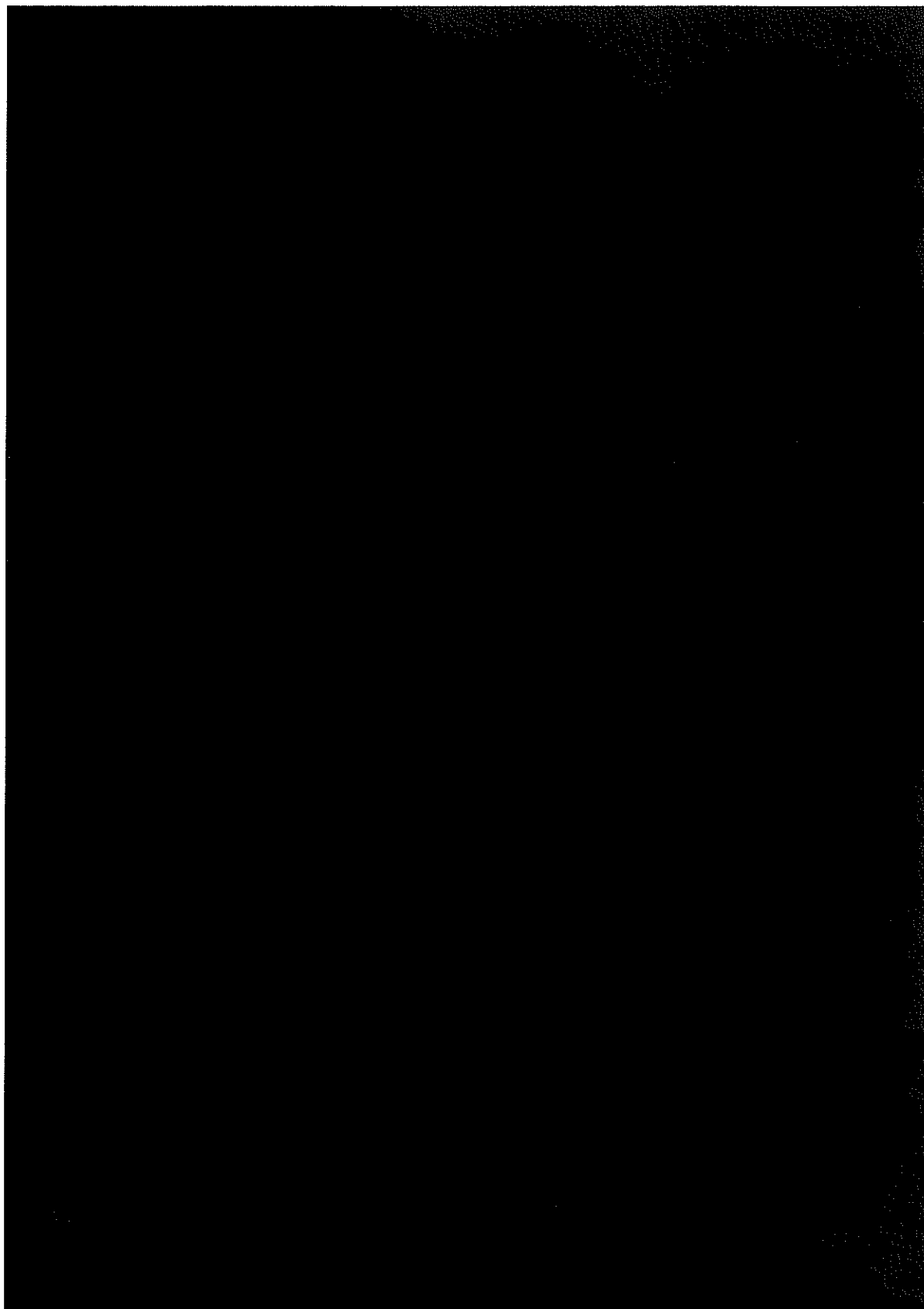
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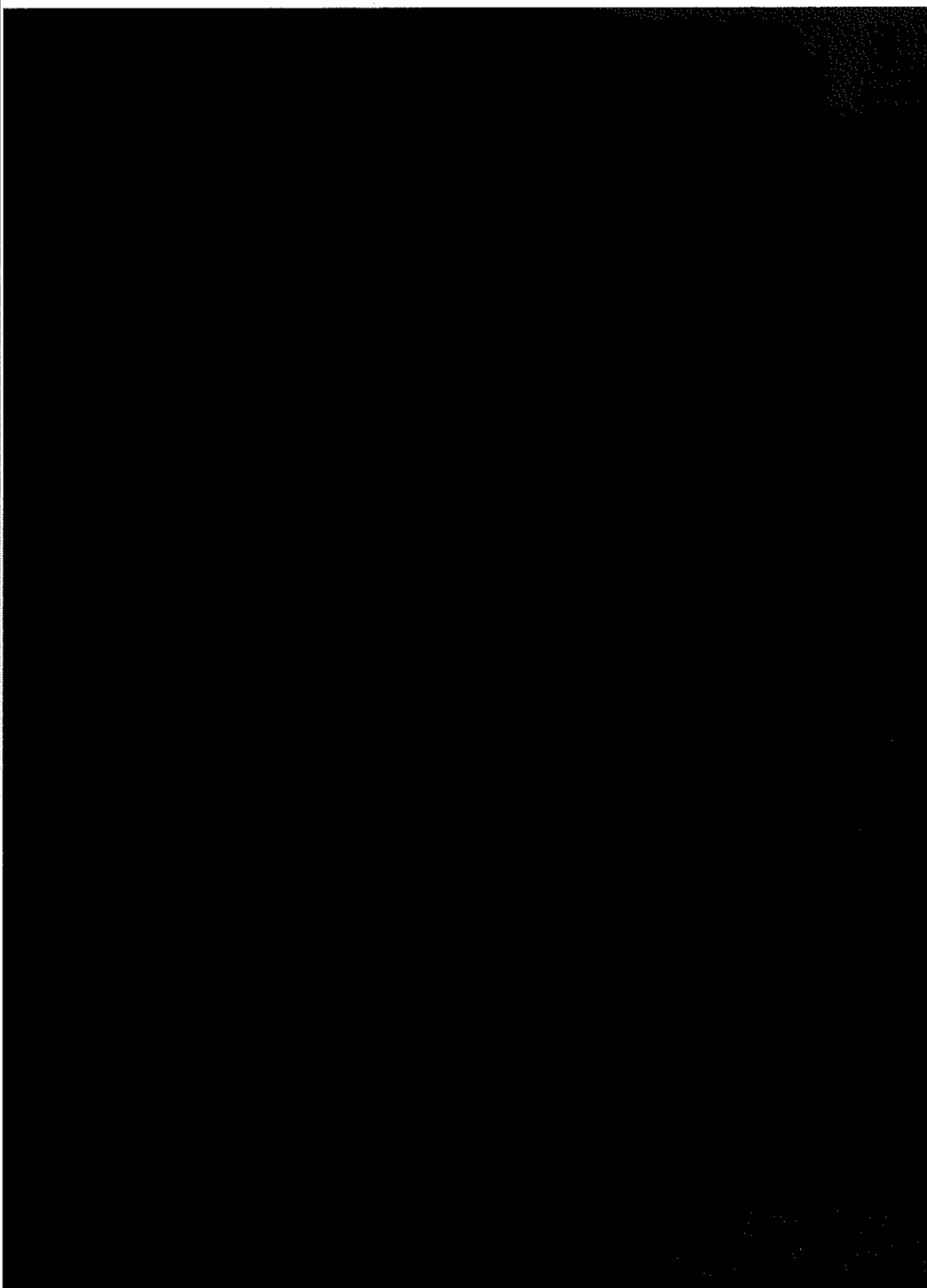
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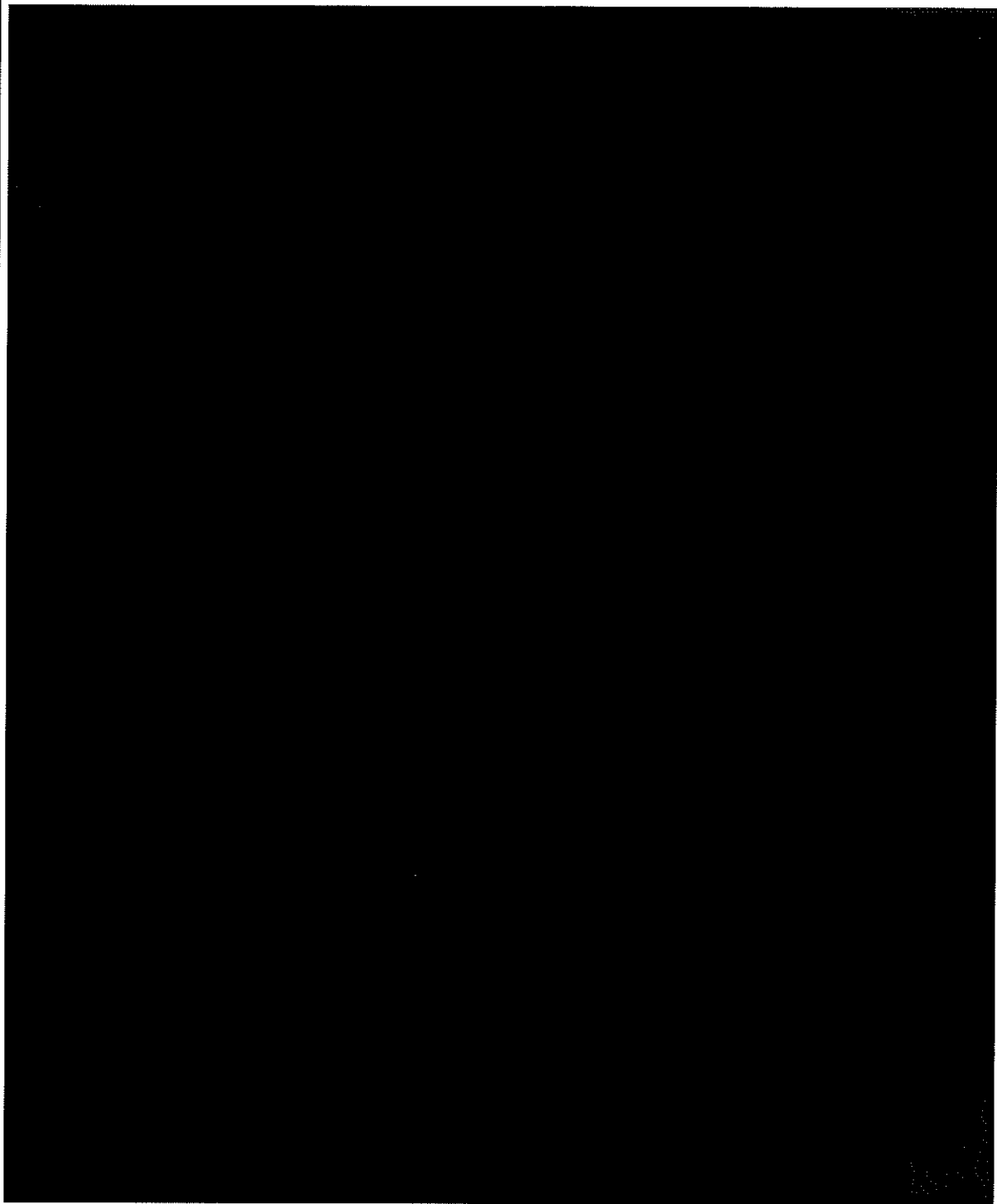
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d. Representative Acts of Pioneer in Furtherance of the Conspiracy

94. Even prior to the class period, examples exist of defendant Pioneer meeting with its competitors in the ODD industry in an effort to stabilize the prices of ODDs. As early as November 2003, Yasuki Hiraoka, Team Leader at HLDS, and an HLDS employee with the last

1 name Nagasawa, had dinner with sales personnel from Pioneer.³⁶ In an internal HLDS document,
 2 the HLDS employees reported to their colleagues that Pioneer had provided HLDS with highly
 3 sensitive business information, including: (1) targeting dates for delivery of new products to
 4 Apple such as the 8x dual ODD; (2) pricing on the Apple account for both 4x drives (under
 5 HLDS's price of \$90) and the 8x drive (\$88); (3) Pioneer disclosed that it was facing production
 6 capacity restraints for its DVD-W slim drive; (4) Pioneer would not be ready to launch its dual
 7 layer drive in the second quarter of 2004 as had previously announced; and (5) that Pioneer
 8 intended to stop their own production for DVD-ROM drives and instead purchase the drives from
 9 a Taiwanese third party.

10 95. A Panasonic document produced in this litigation discloses that in February 2005,
 11 Panasonic and Pioneer both submitted bids to HP for the supply of ODDs in April and May of
 12 2005. Faced with a sharp demand by HP to lower its costs, Panasonic employee Yoshihiro
 13 Takada contacted his known competitor on the account, Pioneer, to ascertain their price and
 14 bidding strategy:

15 I contacted Pioneer the other day; they finished their evaluation last
 16 Wednesday and are bidding \$73/April while it hasn't been decided
 who to use. . . .

17 Armed with this information regarding their competitor, Panasonic refused to lower its price to
 18 HP's requested \$69 for the month of May 2005, and instead suggested that they would bid only
 19 \$71 per ODD. In an internal Panasonic e-mail dated two days later, Panasonic employee Tosio
 20 Nakayama (who had been included on the first e-mail string), instructed his colleagues to
 21 "reinvestigate/ascertain whether Pioneer can actually keep up with the May price, and get back to
 22 me without delay" before Panasonic would commit to the \$71 price HP requested for the May
 23 supply of ODDs. Based on the "results of the investigation," only then would Panasonic respond
 24 with a price to HP.

25
 26
 27 ³⁶ On information and belief, Plaintiffs allege that the HLDS employee with the last name
 28 Nagasawa who met with Pioneer is Ms. Miyako Nagasawa, a team leader for HLDS's Sales
 Team 5.

1 96. In an internal Panasonic e-mail document produced in this litigation and dated
2 May 2005, Tina Phan, Panasonic Sr. Account Mgr. for Apple, updated colleagues on Pioneer's
3 qualification status at Apple and speculated on Panasonic's chances competing for Apple's
4 business:

5 My understanding is Pioneer is very aggressive on pricing as they
6 are not competing well on the engineering side. For CQ4, it'll be a
7 challenge as 2nd source and potentially 3rd source across the board."

8 In a later email, Ms. Phan reported on the exact prices that competitors, including Pioneer,
9 planned to quote Apple. She wrote:

10 After our conference call yesterday, I checked on our competitors
11 pricings: 1. Pioneer's SD process – CQ2 firm quote: \$76.50 –
12 Conditional offer of \$73 for June if qualified for Q45C/and Q88-
13 CQ3 price: 72.50. . . .

14 Based on this information, Ms. Phan concluded that Panasonic's price is "quite competitive."

15 97. In September 2005, Jonae Wilson, a Global Account Manager of Pioneer
16 Electronics (USA) Inc.³⁷ e-mailed Billy Reynolds of the PLDS family direct and asked whether
17 PLDS had "received the official award of business for BD" from Dell. In the same e-mail, Jonae
18 thanked Mr. Reynolds for his time the previous week – confirming that they had directly met.
19 When Mr. Reynolds explained that he had not yet received the official award, Ms. Wilson
20 explained that Pioneer was "going to chat with Dell about the 2nd source opportunities, but
21 didn't want to do so until all was official for [Philips]." Eventually Mr. Reynolds confirmed that
22 the PLDS defendant family had received the award. The implication of this question was that the
23 Pioneer defendants did not want to approach Dell to negotiate the provision of ODDs until the
24 contract with PLDS was final to prevent any price competition over the supply of ODDs for that
25 time period.

26 98. In May 2006, Yasuki Hiraoka of HLDS reported to his colleagues that he wanted
27 to postpone HLDS's price quotation to customer Fujitsu until HLDS could "get more
28 underground info." Mr. Hiraoka then went on to report his meetings with Pioneer and Panasonic.
Regarding Pioneer, Mr. Hiraoka reported that he "had a dinner with Pioneer yesterday."

³⁷ Jonae.Wilson@pioneer-usa.com.

1 Regarding the Dell account, Pioneer told HLDS that it had not promised Dell a rebate on the
2 Slim-DVD-W product. Pioneer disclosed to its competitors, HLDS, that it intended to visit the
3 Dell Austin office the following week, but would not be prepared to discuss rebates with Dell.
4 Mr. Hiraoka reported that Pioneer had "not setup any plan for support like we do for our
5 product."

6 99. In November 2006, Yasuki Hiraoka of HLDS reported to his colleagues that he
7 had met with competitors MEI (Panasonic) and TSST the previous night, and gave an extensive
8 report and stated that "I have a [sic] appointment with Pioneer tonight so I will get updates on
9 their activity directly." The following day (after his meeting with Pioneer), Mr. Hiraoka reported
10 that Pioneer had disclosed it had no plan to launch the 12.7 mm and 9.5 mm slot product to date,
11 given that there was base demand only from Apple. Pioneer confirmed it was in a "[s]erious
12 situation" for slim SM drives, and scared of losing business in this area. They were curious about
13 the TSST/Toshiba defendant's price for this product, and Mr. Hiraoka of HLDS informed
14 Pioneer that "TSST will start to deliver from Q1/07 so [the price] will be up to them."

15 100. In February 2007, Jun Okubo of Panasonic met with General Department
16 Manager Shinichi Nojiri, Department Manager Kenichi Nakamura and Section Chief Hiro
17 Sugawara, all of Pioneer, to discuss the Apple account. Included in the volumes of competitive
18 information exchanged was: (1) Pioneer's capacity for 12.7 mm SD supply to Apple for March
19 (around 9000 units) and that Pioneer could not increase this amount for Apple; (2) that the price
20 estimate from Pioneer for the supply of the 12.7 mm drives was "the same as the information
21 from the other day – they haven't reduced it at all."; (3) that Pioneer didn't "have any new
22 products this whole year (the current model is the one from last spring), so they have no ability to
23 reduce the price further." Panasonic concluded from this last piece of information that it should
24 not reduce its price either.

25 101. An internal Panasonic e-mail document produced in this litigation reveals that in
26 March 2007, Yoshi Takada of Panasonic provided a further report to his colleagues regarding the
27 HP account and the consensus of the various Panasonic entities to reach agreement on a bidding
28

1 strategy for the HP account. Mr. Takada reported that Panasonic Shikoku Electronics Co., Ltd.
2 (“PSEC”) had directly spoken with Pioneer to confirm its pricing in the coming months:

3 After I finished writing this e-mail, I saw Amy’s update
4 information. It seems that we need to change 2nd round strategy to
5 go around \$31.60 . Only one thing I confirmed from PSEC
6 (*directly talked with Pioneer*) is they quote really aggressive [sic]
7 price in Apr-May, but will slow down in June and based on June
8 price, they will consider strategic price again in July.

9 Mr. Takada instructed his colleagues to “collect more information” from Panasonic’s competitors
10 including Pioneer, before deciding on their second round bidding price. Later that month, Mr.
11 Takada reported on his investigation and communication with competitors regarding pricing
12 strategy and getting “behind-the-scenes information on second round bids.” Specifically, he
13 reported Pioneer’s first round results, among others, and stated that, “according to HLDS,
14 Pioneer has made a definite statement that they’ll handle all their Q2 prices aggressively,”
15 showing that Pioneer communicated with competitors about pricing strategy in between rounds
16 of a procurement event.

17 102. In June 2007, Bruce Jeong of HLDS reported extensive and detailed competitive
18 “information from a discussion with the Japanese ODD company in Taiwan.” An employee of
19 the “P company” [code name for defendant Pioneer] shared with Mr. Jeong Slim drive quality
20 issues and future bidding strategies, as well as, production line and manufacturing information
21 for Slim Slot products and small quantities of HH DVD-RW and HH BD products. Mr. Jeong
22 also related information he learned from Pioneer about its transactions with customers, including
23 its bid price for Q3to Acer, its forecast of PC sales Apple, and competitive information sharing
24 with HP.

25 103. Pioneer employees met with competitors for dinner and drinks, as well, which
26 provided the co-conspirators another opportunity to share competitive information. For example,
27 in September 2007, Shinichi Yamamura of Sony emailed a colleague that he went drinking with
28 Pioneer employees, including Toshihiko Kurihara, General Manager of the Components Business
Division of Pioneer. In May 2008, Katsuhiro Nakano of Sony and Shinichi Nojiri of Pioneer
arranged to meet for meal, assuring each other that senior managers on both sides would be in

attendance: "Sr. executive manager" Toshihiko Kurihara of Pioneer and Shinichi Yamamura (Representative Director and President of Sony NEC Optiarc), Hidetoshi Shimizu (General Manager of Sales at Sony NEC Optiarc), and/or Yasuro Katori (Senior General Manager, Strategic Planning Division, Sony NEC Optiarc) respectively.

104. In July 2008, Bruce Jeong again met with "competitor (P*****)'s person in charge of Acer." The Pioneer employee disclosed to Mr. Jeong that Pioneer's current pricing to Acer, including that Pioneer offered Acer pricing under \$90 at the end of June, and had capacity of approximately 80-100,000 per month for half-height Blu-ray combo drives. Pioneer further informed Mr. Jeong that its slim Blu-ray drive would be priced at \$95-\$100 for the third and fourth quarter of 2008, and that its monthly capacity was approximately 100,000 drives.

105. When asked about this document at deposition, Mr. Jeong of HLDS stated:³⁸

Q: Mr. Jeong, please look at Exhibit 19. You agree with me that this is an e-mail that you sent on July 21st, 2008, to other HLDS employees, including your superiors; correct?

A: Yes. It seems like it.

Q: The subject was the details of consulting with the competitor?

A: Yes.

Q: Now, you state after, you say, "Dear all recipients. I hereby report on the details of consulting with Competitor," parenthesis, "P," and then you use one, two, three, four, five, six asterisks, and then say, "person in charge of Acer today"; right?

A: Yes.

Q: And if you filled in "i-o-n-e-e-r," it would fit perfectly for those asterisks; right?

A: Yes, that seems right.

Q: Do you agree with me, sir, that you spoke with Pioneer's person in charge of Acer concerning the information contained in this e-mail?

A: That seems right.

³⁸ Jeong, Dep. vol.2, 2, 223:12-124:13, April 19, 2013.

1 Q: So providing we are in agreement that it's likely it was
2 Pioneer's person in charge of Acer that you were speaking
with, who do you believe you had been talking to?

3 A: I do not recall. I believe it was either Jane or her boss.

4 106. In September 2008, Mr. Jeong of HLDS again contacted Pioneer regarding the
5 volume of its sales to Acer. Mr. Jeong reported to his superiors and other team members that
6 "[a]ccording to the confirmation with other vendors," that Pioneer's fourth quarter volume of
7 slim Blu-ray drives to Acer had been reduced to 50,000 (from 80,000 units). Mr. Jeong also
8 confirmed that Pioneer's current pricing to Acer on the half-height blu-ray combo drive was \$85.

9 107. An internal TSST-Korea document produced in this litigation reveals that in
10 October 2008, Kenny Lee, Senior Manager of TSST, reported the results from a 12.7 DVDR HP
11 procurement event to his colleagues. Mr. Lee stated that the competitors, including Pioneer,
12 reached an agreement not to "overheat each other" in auction, leading to a favorable result:
13 "Result: 1st place \$24.40, TSST M/S 36% 2nd place HLDS, 3rd QSI, 4th Pioneer because
14 initially the atmosphere was do not overheat each other, there is no actual difference between 2nd
15 and 3rd place in price 24.2~24.4 but fortunately we can get the 1st place supply by small price
16 difference."

17 108. In November 2008, Mr. Jeong again spoke to an employee of "Pi****" (code name
18 for Pioneer), who informed Mr. Jeong that Pioneer had received a forecast reduction from Acer
19 on Blu-ray drives of approximately 20 percent. Pioneer informed Mr. Jeong that despite Acer's
20 request for a price change, Pioneer kept the existing price on these drives.

21 109. An HLDS document produced in this litigation contains a report in December
22 2008, from Daniel Hur at HLDS showing that Pioneer contacted HLDS to discuss HP auction.
23 Specifically, James Park, TSST's HP cPC account and contributor to the report, writes that
24 Pioneer "[s]uggested to line-up BD Combo in '09 Q4 (at \$65)."

25 110. Quanta was a key player in obtaining information from Pioneer, filling its role as
26 it did with other ODD market participants as both a contract manufacturer of ODDs and also a
27 competitor. Quanta's documents, produced in this litigation, show that Haw Chen, general
28 manager of Quanta, in particular obtained information from Pioneer and used it to influence

1 Quanta's pricing strategies. In January 2009, Haw Chen reported to his colleagues that he had
2 recently spoken with Pioneer:

3 By the way, I confirm today that Pioneer new model is just
4 focusing on Toshiba, VAIO and Apple. And seems they do not
5 plan to continue business with those 3 customers for 2nd half of
FY2009 because they believe cost won't be competitive enough at
that time.

6 In response, Ms. Huang replied, in part: "Ah, will they be participating in the HP's e-auction this
7 time?" Later e-mails show that Mr. Chen sought out and received information regarding the
8 upcoming HP auction. Days after Ms. Huang's e-mail, an internal Quanta e-mail produced in this
9 litigation asked Haw Chen to work out a deal with Pioneer not to compete: "Dear Haw: Can you
10 work out some kind of agreement with Pioneer, not to be too extreme yeah? They only have
11 approximately 400k left, no reason for them to fight for 3rd right." Mere days later, in reporting
12 Quanta's strategy for the HP auction, Caroline Lin of Quanta asked Haw Chen to get "the bottom
13 line of Pioneer" to assist in Quanta's bid strategy. In the end, Quanta did place third in the HP
14 procurement event as it had desired. Contemporaneous documents confirm continued meetings
15 between Pioneer and Quanta, including an April 2009 meeting between Haw Chen of Quanta and
16 S. Nojiri and K. Yokoyama of Pioneer where Mr. Chen explained to his colleagues the meeting
17 was specifically "for information exchange."

18 111. Pioneer continued to provide HLDS with information, even when it was not in its
19 interest to do so. For example, in February 2009, an employee of Pioneer informed Mr. Jeong
20 that although it had qualified to supply a slim Blu-ray drive writer model to Acer, that the orders
21 from Acer had been nearly zero.

22 112. And as with other conspirators, the supply of OPUs (the component part of the
23 ODD called an optical pickup unit), became a channel for the exchange of sensitive business
24 information. For example, in January 2009, PAVC (a division of Panasonic) informed HLDS that
25 Pioneer had started to deliver Slim BD-W drives to Acer and Sony.³⁹ PAVC is the division of
26 Panasonic which supplied OPUs to other ODD manufacturers. Panasonic's inside information

27 ³⁹ Although the corporate relationships between the many divisions and affiliates are often
28 unclear, on information and belief, PAVC refers to Panasonic AVC Networks Company.

1 regarding Pioneer (and subsequent report to HLDS) was based on Pioneer's purchase of OPU's
 2 from PAVC at the rate of 10,000 per month. Yasuki Hiraoka of HLDS reported this information
 3 to his colleagues and expressed his concern that because Pioneer was in a "severe situation," they
 4 could start "dumping" product. Mr. Hiraoka's colleague at HLDS, Bruce Jeong, reported back
 5 that he "checked with Pioneer and Acer" and that Pioneer had qualified on the BD-W model, but
 6 was supplying very little product (negating any pricing threat).

7 113. Similar to the incestuous relationships with other defendants, Pioneer's position as
 8 both a customer to some of the ODD manufacturers as well as ODD manufacturer itself opened
 9 channels for illegal and anticompetitive communications. For example, internal PLDS documents
 10 produced in this litigation show that in late 2008, a number of PLDS employees (including Claire
 11 Lin and Charlie Tseng), met with Ken Usui, a sales manager at Pioneer,⁴⁰ regarding the possible
 12 supply of ODD drives from PLDS to Pioneer. After the meeting, Claire Lin of PLDS e-mailed
 13 Mr. Usui expressing PLDS's gratitude for arranging the meeting and for "share [sic] so many
 14 market information with" PLDS. Similarly, in early 2009, PLDS approached Pioneer as a
 15 supplier of a particular type of ODD drive (DVD-RW). Pioneer declined to use PLDS as a
 16 supplier at that time, but Ken Usui, a sales manager at Pioneer, responded to Claire Lin (an
 17 employee of PLDS): "Let's keep in touch with market trend and I am willing to share the market
 18 information." Within days, Ms. Lin responded that Charlie Tseng of PLDS would like to speak
 19 with him regarding the supply of a particular type of drive and "to exchange the market trend
 20 again." And indeed, internal PLDS documents reflect the exchange of sensitive business
 21 information.

22 114. Other internal PLDS documents produced in this litigation show that in March
 23 2009, Claire Lin reported to Charlie Tseng (both of PLDS) an "Update of Pioneer" which
 24 included information from Mr. Usui about the allocation of OPU's, and information regarding
 25 Pioneer's production and outsourcing of certain ODD drives:

26 3) ODD

27
 28 ⁴⁰ ken_usui@post.pioneer.co.jp.

Pioneer Taiwan commented that almost no OPU shortage impact of H/H DVDROM w/Q but Usui san said they tried really hard to secure the allocation. Pioneer Taiwan told us that out-sourcing H/H 22X will launch in May since Pioneer's own factory made H/H DVDRW will stop production in May. As for 24X, no further information. Has asked for Procurement team's help to check.

115. In June 2009, Pioneer Corporation and Sharp Corporation announced that they would be establishing a joint venture to develop, design, manufacture and sell optical-disk products such as optical disk drives, recorders and players. Pioneer and Sharp planned to launch operations on the joint venture on October 1, 2009. Pioneer Corporation was to own 66 percent of the joint venture and Sharp Corporation was to own 34 percent of the joint venture. Toshihiko Kurihara, the former general manager of the Components Business Division Home Entertainment Business Group of Pioneer Corporation was to become the president of the newly formed joint venture. Pioneer was given the authority to appoint three of the directors, and Sharp Corporation the remaining two directors.

e. Representative Acts of Quanta in Furtherance of the Conspiracy

116. The following paragraphs reflect the Quanta Defendants' exchange of pricing, supply, capacity, quality and bid positioning information with their competitors PLDS and HLDS. The purpose and effect of agreeing to exchange this competitive business information was to stabilize ODD prices by facilitating price collusion.

117. During the relevant time period, Quanta, in its role as a manufacturer for Defendants, shared revenues with Defendants based on the final price paid by OEMs. Thus, Quanta's revenues increased if the prices paid to Defendants for whom Quanta manufactured was artificially inflated.

118. In May 2008, at a time when Quanta was acting as a manufacturing partner with Sony Optiarc, Haw Chen⁴¹ of Quanta e-mailed Shu-ming Tzeng⁴² of Quanta to report he had spoken with Jerry Hsieh of PLDS regarding an upcoming Dell procurement event. He reported:

⁴¹ Haw Chen, General Manager, Quanta.

⁴² Shu-ming Tzeng, Sales and Marketing Manager, Quanta.

1 Jerry said SATA RW price, TSST and HLDS is around \$24.6, PLDS keep high at \$27. But my
2 phone is quite noisy. I am sure \$24.6 of TSST, not sure about 27 of PLDS. Need to check
3 again. He say the TAM is only hundred something thousands.

4 In that case, our PATA can keep as high as possible.

5 119. In October 2008, Caroline Lin⁴³ of Quanta e-mailed other Quanta employees
6 regarding an "RFQ Discussio [sic] with Amino-san." On information and belief, the e-mail
7 subject referred to Amino Masafumi from Sony Optiarc. Quanta and Sony Optiarc were to act as
8 partners in an upcoming ODD procurement event. Ms. Lin of Quanta reported that, "I'll have
9 dinner w/HLDS Eugene [Yang] this Friday evening and get the consensus on the price
10 protection."

11 120. The following Monday, Ms. Lin reported to her colleagues at Quanta, Sally Huang
12 and Haw Chen that "Last week, I met HLDS guy. According to what he said, their best price is
13 around 24.65 eventually. However, the [sic] they won't go that far in the 1st round as well and
14 might provide a higher price to see HP's feedback & then react."

15 **f. Representative Acts of Sony, NEC, Sony NEC Optiarc, and Sony**
16 **Optiarc in Furtherance of the Conspiracy**

17 121. Prior to 2005, Sony and NEC individually designed and manufactured ODDs. In
18 2005, ODD producers NEC and Sony formed the joint venture, Sony NEC Optiarc, Inc. In late
19 2008, NEC sold off its interest in Sony NEC Optiarc to Sony, the venture's name was contracted
20 to Sony Optiarc and it became a wholly owned Sony subsidiary. The following paragraphs reflect
21 this family of Defendants' exchange of pricing, supply, capacity, quality and bid positioning
22 information with each other (prior to their joint ventures) and their competitors TSST, HLDS and
23 PLDS. The purpose and effect of agreeing to exchange this competitive business information was
24 to stabilize ODD prices by facilitating price collusion.

25
26
27 ⁴³ Caroline Lin, Specialist in the ODD Unit reporting to Haw Chen, Quanta
28 (caroline.lin@qsitw.com).

1 122. In December 2004, h-moriwaki@az.jp.nec.com e-mailed Kris Williams, the Dell
 2 Account Manager for NEC Solutions (America), among others, and describing his dinner with a
 3 Sony senior manager, the exchange of competitive information regarding ODDs:

4 I had a dinner with Sony senior manager (same as my position) last
 5 night and had some information about DVD Burden slim.
 6 According to Sony, their monthly capacity is limited to about
 7 140k/month due to OPU supply from Sanyo. 40-60k out of 140k is
 8 allocated to Dell currently. Sony's low cost version will start its
 9 MP in April next year, and that is exactly same as our MP timing.
 10 We need to be very careful to compete Sony on 2nd generation of
 11 8x Slim. In addition, Sony mentioned that Dell is still planning to
 12 have 3rd Slim vendor. Possibly HLDS or TSST. If so, it is very
 13 critical for us, and should work carefully to avoid 3rd vendor at
 14 Dell.

15 123. In July 2005, Hank Hayami of NEC e-mailed to NEC employees⁴⁴ that "when our
 16 [NEC's] top management met TSST top management last week, TSST clearly mentioned as
 17 below. . . ." The e-mail went on to discuss a number of sensitive issues regarding ODD products:

18 1)For Dell Slim

19 TSST is using OPU made by Sharp for Slim DVD and the hologram inside OPU caused
 20 a technical trouble of double layer. TSST dispatched engineers to Sharp OPU
 21 production lines to find out any rootcause, but due to this issue, the current
 22 yield rate is low and TSST could not find any solution yet.
 23 According to TSST, since Sharp OPU business is becoming a minus P/L impact,
 24 Sharp decided to shift key engineers resources to Brd Division.
 25 This is one of the biggest reason on why the above issue happened.
 26 From TSST standpoint, they would like to ask NEC to support Dell in supply
 27 more strongly, because TSST cannot afford to supply enough to Dell.

28 2)HP Slim

TSST mentioned that Slim DVD w/LS for HP is going quite well.
 The current production rate is 50K/month, but HP requested TSST to support
 100-150K/month. However, TSST feels that they should very carefully monitor
 if LS media is really recognized by end-users or not in marketability.
 The torque of the stepping motor for TSST LS slim drive is weak and
 TSST needs an encoder in the feeder function.
 The picture quality on LS media drawn by TSST drive is better than
 HP's own reference samples and HP praised it.
 TSST is prepared to support LLS and plan to isolate it from LS development.

The information was forwarded by to Kris Williams⁴⁵ of NEC who stated that he had "a good
 contact at Toshiba, and I will contact him tomorrow. I will also provide the yield rate at Sharp
 factory and TSST (Samsung) drive factory on the new lead-free slim 8X DVD RW."

⁴⁴ Including s-takakura@ct.jp.nec.com and Glenn Brower, glenn.brower@necsam.com.

⁴⁵ Kris Williams of NEC, Dell Account Manager at NEC Solutions (America).

1 124. In April 2006, Kris Williams of NEC reported that Dell had requested that all
2 suppliers start their bid for the month of June 2006 at \$1.20 lower than their May pricing.
3 Williams went on to explain that “I was contacted by all the other Account Managers to Dell
4 about this mandatory bidding and none of the other suppliers are going to participate with the
5 mandatory \$1.20.”

6 125. In August 2006, Kris Williams e-mailed Sony NEC Optiarc employees reporting
7 that he had “confirmation today that HLDS may not be able to fully support the demand (TAM)
8 that they have been given for HH PATA DVDRW. With the last TAM re-adjustment for Q3,
9 HLDS won 60% TAM of HH PATA DVDRW. . . . HLDS confirmed that they are having issues
10 procuring enough of there [sic] OPU for the PATA DVDRW drive. They may only be able to
11 support 40%~50% of the Dell overall PATA DVDRW TAM starting in Oct.” Williams went on
12 to propose that PLDS would work to push Dell for additional TAM.

13 126. In October 2007, Kris Williams of Sony NEC Optiarc e-mailed Vincent Chng⁴⁶ of
14 Sony NEC Optiarc advising the new employee that “[t]he only other piece you need to round out
15 your job responsibilities, is the data gathering piece from other suppliers. I think that you can be
16 more bold with Tokyo if you have good info on competitors.” Later in the e-mail string, Vincent
17 Chng requested contact from Williams’ contact at HLDS. In response, Mr. Williams responded,
18 “Jason should contact you soon. . . . I will also try to put you in contact with Matt from TSST. . . .
19 I will give you contact info for him.” On information and belief, Jason refers to Jason Kim from
20 HLDS and Matt refers to Matthew Lee at TSST.

21 127. In December 2007, in response to an internal question regarding rankings for a
22 Dell supplier review, Kris Williams of Sony NEC Optiarc openly acknowledged his competitor
23 contacts:

24
25
26
27
28 ⁴⁶ Vincent Chng, Global Account Manager, Sony NEC Optiarc.

1 Dell does not share the other ODD supplier information.

2 We have to contact each supplier and exchange our information.

3 I have committed to Vincent that I will help him compile the other ODD supplier scores.

4
5 I should have all the other suppliers score by the end of the day.

6 128. In March 2008, Kris Williams of Sony NEC Optiarc e-mailed Vincent Chng of
7 Sony NEC Optiarc asking for the pricing of any current HH BD products being sold to Dell. In
8 response, Chng stated that he didn't think Dell "will share this kind of info with" him, but then
9 stated: "But I have checked with PLDS and they mentioned that the HH BD writer that they are
10 supplying now is at USD250. This price is rather high cuz [it's] a very old drive that they are
11 shipping to Dell. According to him, the market price should be around USD150."

12 129. In August 2008, Vincent Chng of Sony (Vincent.chng@ap.sony.com) e-mailed a
13 number of Sony Optiarc and Quanta employees, including Shu-ming Tzeng of Quanta thanking
14 the team for participating in an Internet Negotiation for Dell of ODD products and reporting the
15 final prices of all competitors in the procurement event. Mr. Chng stated that "HLDS \$31.35 is
16 their Q4 RFQ price. (They provided Q3 and Q4 price in their RFQ submission) According to
17 HLDS, PLDS RFQ price for jam 09 is below \$31. (I will check out this price)."

18 130. Defendants Sony Optiarc, Quanta and PLDS also illegally rigged a Dell ODD
19 procurement event in December 2008. Dell held an auction event closing on December 1, 2008
20 for ODDs, relating to a February 2009 supply period. For this procurement event, Sony Optiarc's
21 ODD product was to be manufactured by Quanta, and thus, Quanta was also involved in the
22 price-fixing conspiracy. The PLDS global account manager called his or her counterpart at
23 Quanta, and the two companies reached agreement on PLDS ranking fourth behind Sony Optiarc.
24 PLDS explained to Quanta that it had newly qualified for the ODD Product involved in the
25 auction and had submitted a low reference price as a part of the qualification process with Dell.
26 PLDS explained that it was not willing to go much lower than this reference price. And in fact,
27 PLDS did not bid below this reference price. PLDS bid for fourth place in the February 2009
28

1 auction. Sony Optiarc, apprised of the bid-rigging by its manufacturer Quanta, bid to third place.
 2 Dell, the customer running the February 2009 auction, then pressured PLDS to lower its price,
 3 which it did by five cents. PLDS then called Quanta to tell it that PLDS was acceding to Dell's
 4 pressure and lowering its bid by five cents. Quanta then communicated this information to Sony
 5 Optiarc and Sony Optiarc also lowered its price by five cents.

6 **g. Representative Acts of the Teac Defendants in Furtherance of the**
 7 **Conspiracy**

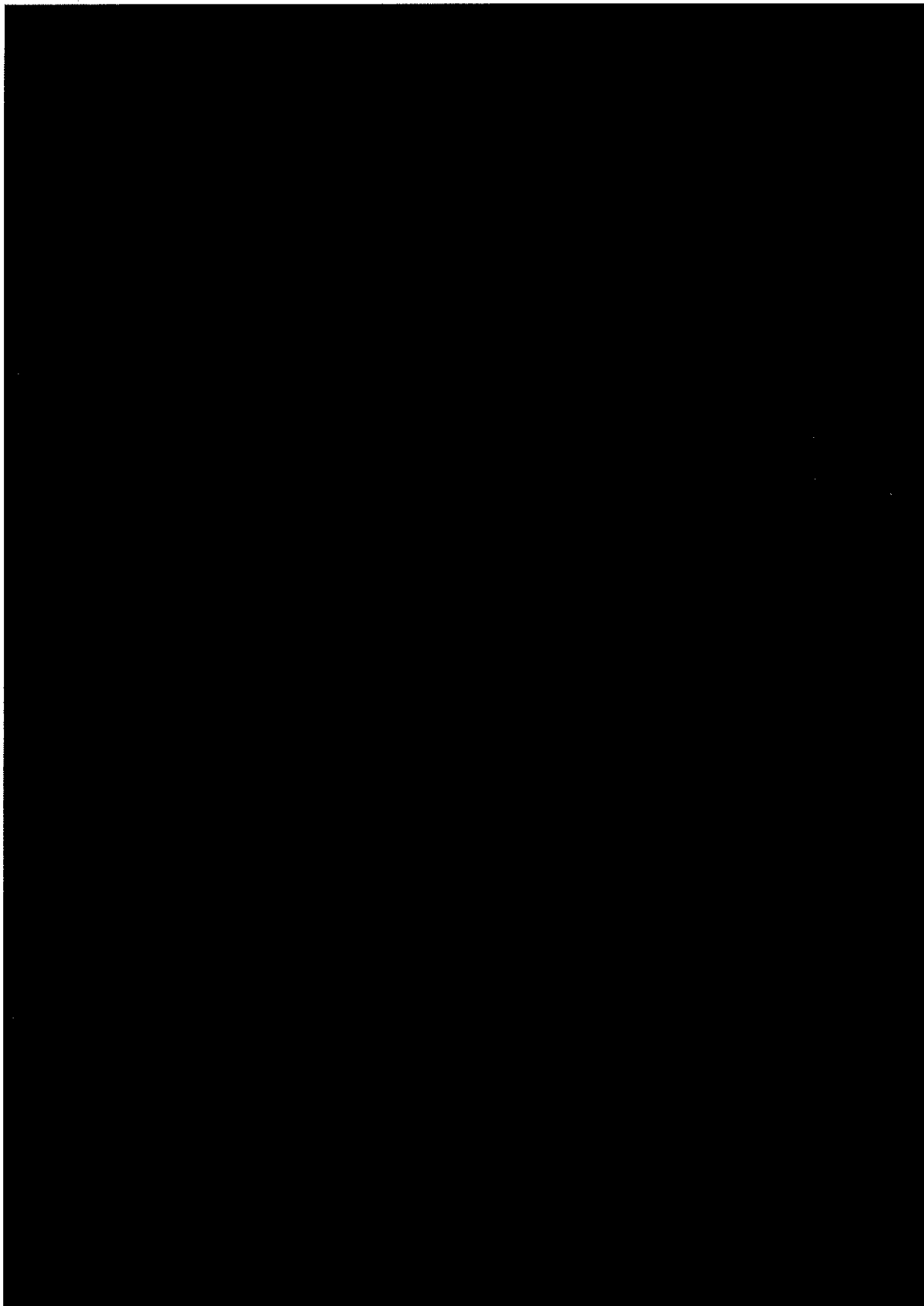
8 131. The following paragraphs reflect the Teac Defendants' exchange of pricing,
 9 supply, capacity, quality and bid positioning information with their competitors Sony NEC
 10 Optiarc and PLDS. The purpose and effect of agreeing to exchange this competitive business
 11 information was to stabilize ODD prices by facilitating price collusion.

12 132. In July 2007, Kris Williams of Sony NEC Optiarc America, Inc. compiled
 13 information about slim PATA tray-loaded DVD-RW drives, Teac confirmed that it was paying
 14 \$1.91 for one of the component parts of the drive.

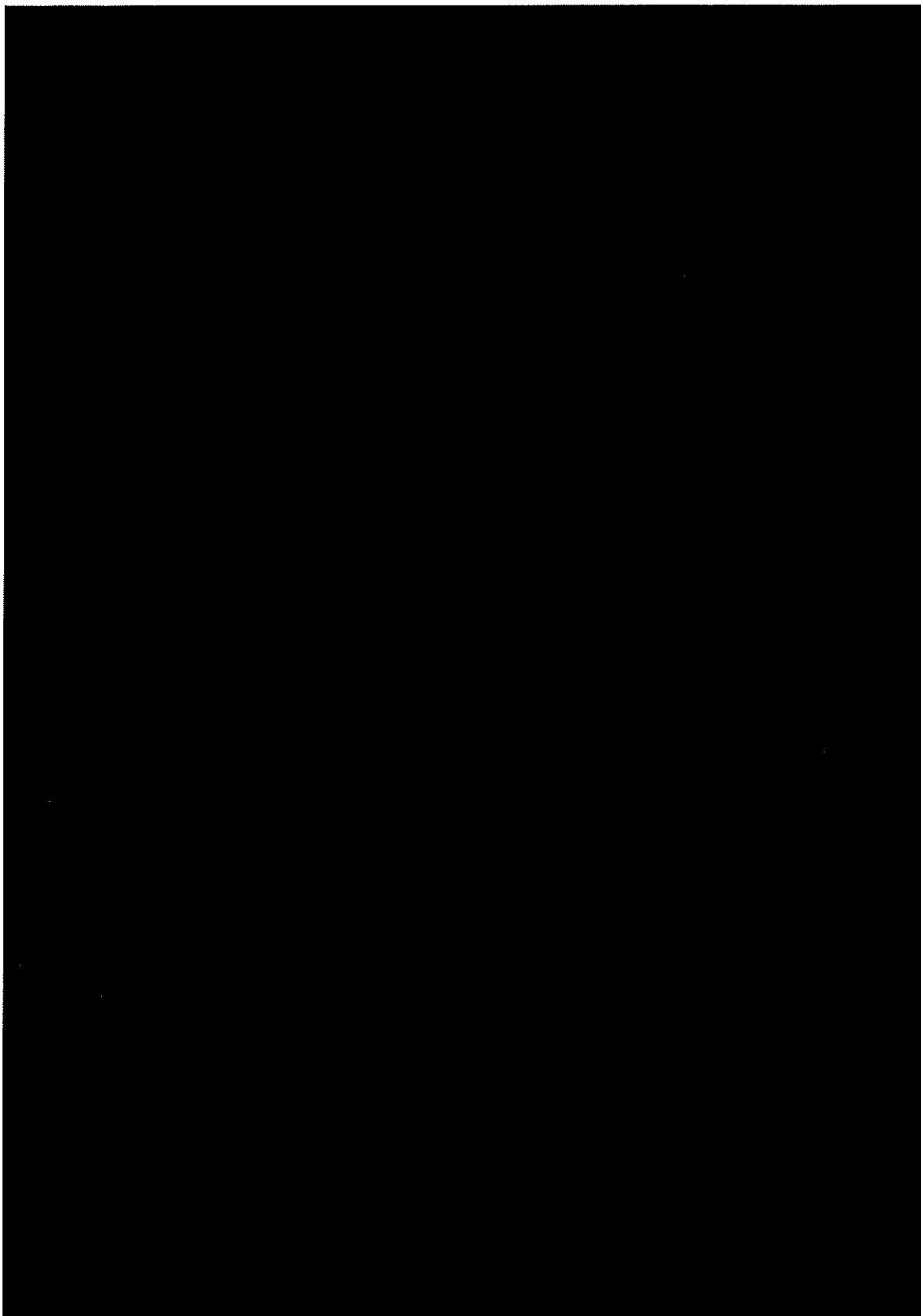
15 133. In November 2007, an internal e-mail from Kris Williams of Sony NEC Optiarc
 16 reported his conversation with Teac, during the middle of an internet negotiation with Dell:

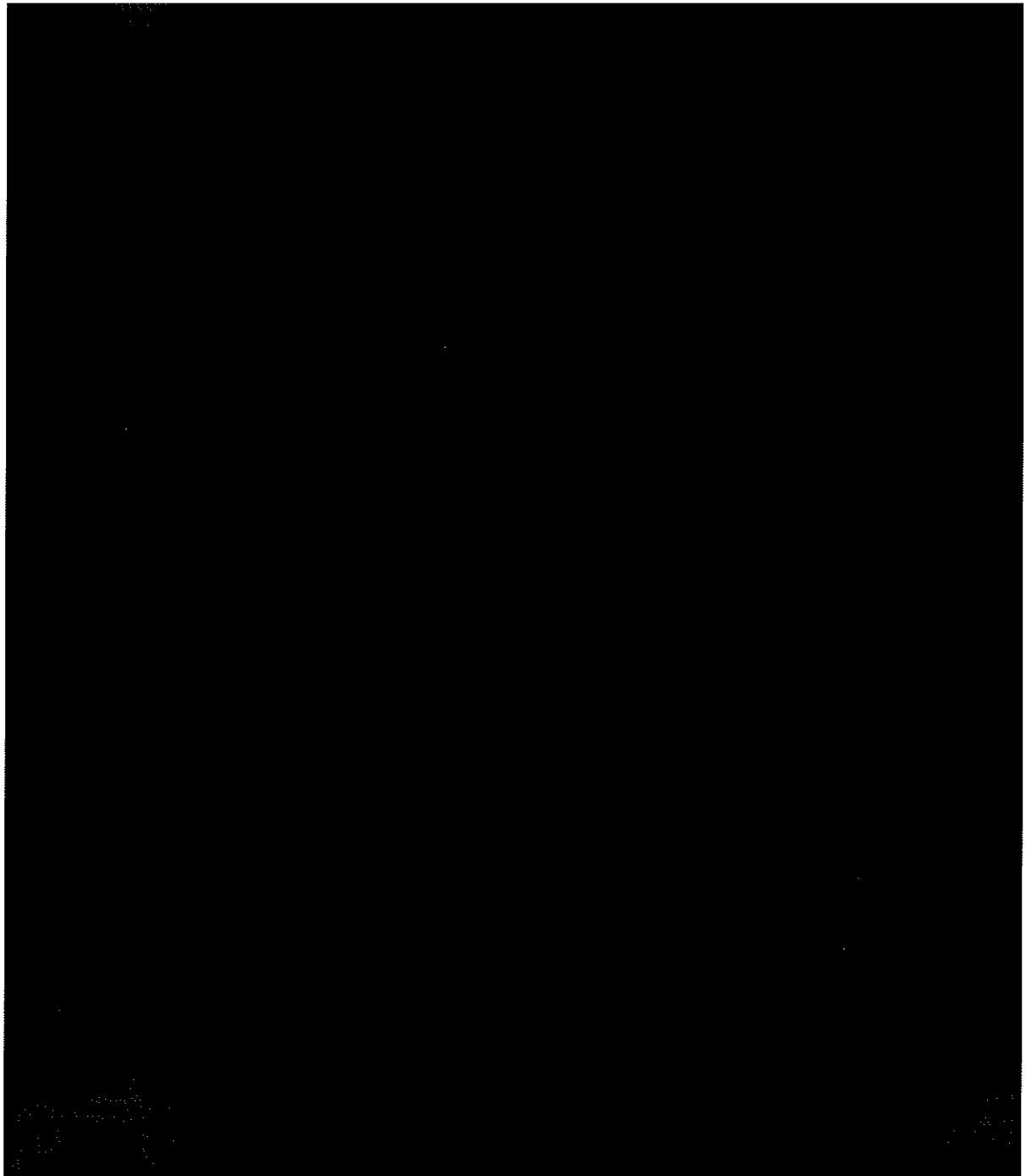
17 I confirmed that TEAC has a native DVD-ROM and they are
 18 currently in 1st position with their bid. They did not quote
 19 specifics, but it sounds like no other supplier will beat their bid for
 20 their slim native DVD-ROM. On Combo, TEAC is in last position
 21 from a price standpoint and they have no plan to try for any higher
 22 position. Alex [from Dell] is telling them that they are in last
 23 position and that they will receive 0% TAM. This conflicts with
 24 what Alex is telling us, as he is saying we are in last position for
 25 slim Combo.

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C. Defendants' Illegal Conduct Stabilized Prices and Harmed Consumers

143. Defendants' conspiracy had the following effects, among others: (1) even assuming that Defendants' illegal conduct was limited to only those sales of ODDs to computer giants Dell and HP (which it was not), Defendants' illegal conduct stabilized prices of ODDs sold to other OEMs and through other sales channels; (2) prices for ODDs sold by Defendants

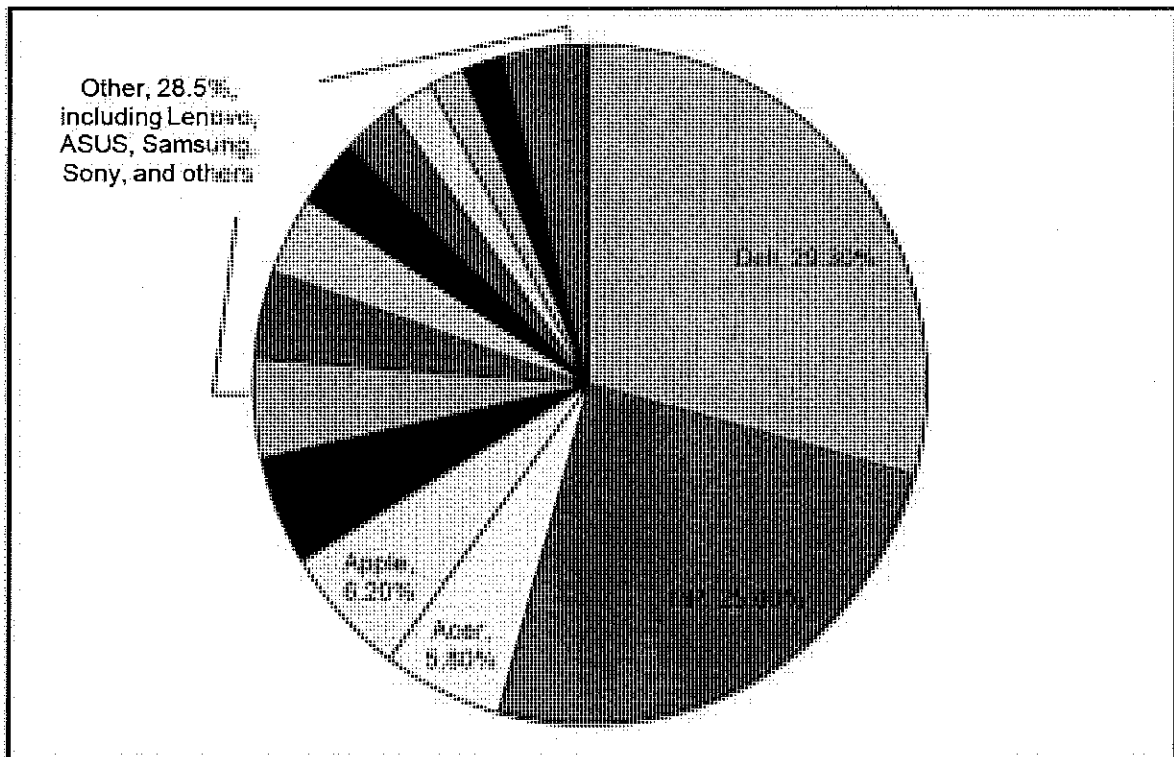
1 have been raised, fixed, maintained, and stabilized at artificially high and noncompetitive levels
2 throughout the United States; (3) decreased technological innovation; and (4) indirect purchasers
3 of ODDs have been deprived of the benefit of free and open competition in the purchase of ODD
4 Products.

5 **1. Economic Evidence Will Show Defendants' Conspiracy Stabilized ODD**
6 **Prices Paid by Other OEMs and in Other Sales Channels**

7 144. Defendants' illegal conduct stabilized the prices of ODDs beyond merely the
8 ODDs Dell and HP purchased. Even if Defendants' overt acts in furtherance of their object to
9 stabilize ODD prices were limited to sales to HP and Dell – which they were not – these
10 anticompetitive acts would have been sufficient to stabilize ODD prices paid by other OEMs and
11 purchasers in other sales channels.

12 145. Economic evidence will show that just by inflating the prices to HP and Dell,
13 ODD prices will be artificially elevated for other ODD purchasers. The economic impact to other
14 purchasers would occur because HP and Dell are major purchasers of ODDs, who normally buy
15 their ODDs while managing supply risk. Major purchasers do this by distributing their purchases
16 across a portfolio of suppliers and supply channels. This behavior helps major purchasers reduce
17 component costs, in part by ensuring these firms are faring no worse than paying market price. In
18 short, if major purchasers such as Dell or HP could buy ODDs at a lower price from an ODD
19 distributor or electronic manufacturing service, it would do so.

20 146. Dell and HP have a majority share of ODD purchases for the personal computer
21 market. As the following graph demonstrates, in 2007 alone, HP and Dell made up over 50
22 percent of ODD purchases for the personal computer market:
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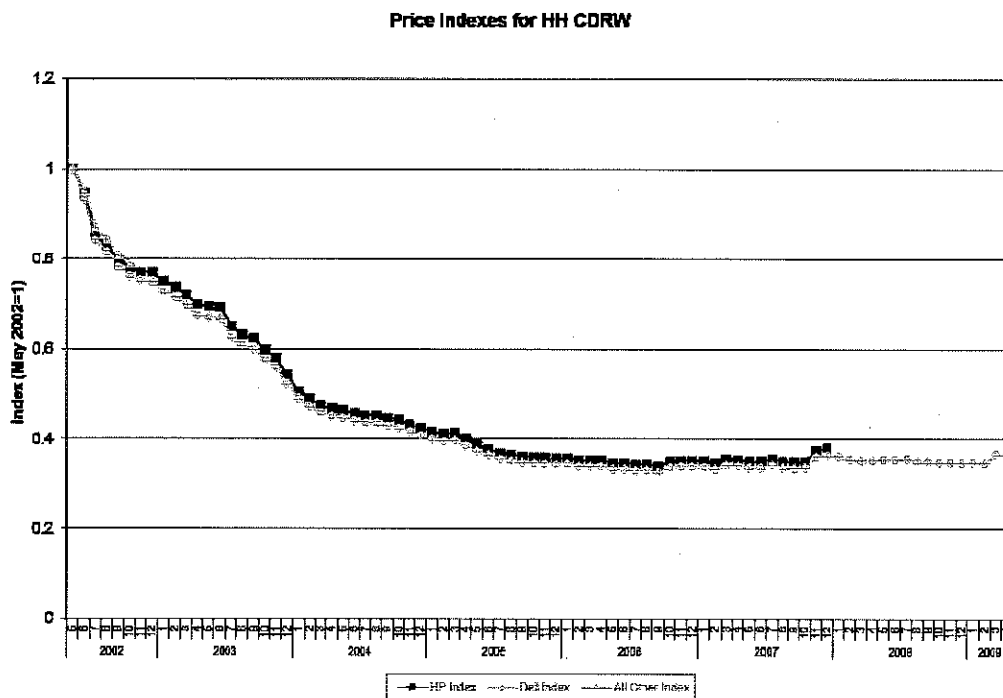


147. Thus, if Defendants stabilized (artificially increased) the sales prices to Dell and HP, while not doing the same for other customers, Dell and HP would either demand a lower price from Defendants or shift a larger share of their purchases of ODDs to these other purchasing channels with lower ODD prices. The shift of some portion of Dell and HP demand to these other channels would raise prices on existing supplies in these other channels, and ultimately lead the Defendants to raise prices in these other channels as a response to rising demand in those channels, and to discourage further erosion of their direct sales to Dell and HP. As a result, under either scenario, Defendants, acting as rational economic actors, would attempt to ensure prices of commodity products (ODDs) would closely track prices of ODDs Defendants sold to HP and Dell.

148. As a consequence, any conspiracy to maintain or raise prices to the largest customers, Dell and HP, would have a broad and pervasive impact, raising the price to all customers and market segments purchasing ODDs.

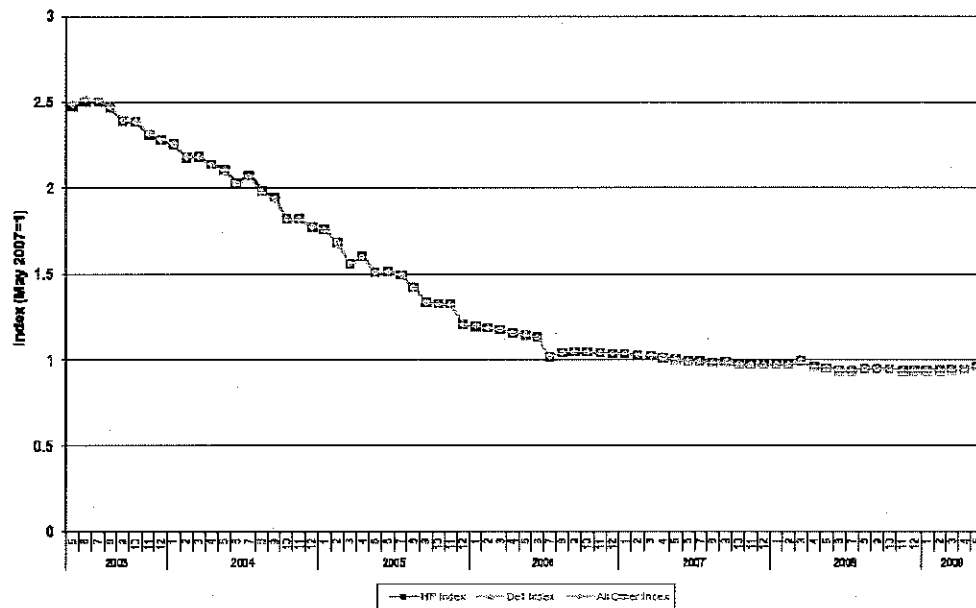
149. Economic evidence supports this allegation. Transaction sales data from one Defendant demonstrates that ODD prices paid by different customers moved together during the conspiracy. Price indices for Dell, HP and other ODD customers are virtually indistinguishable. This is demonstrated below in a series of charts which compare the price of ODDs sold by one Defendant to Dell and HP, against the prices of ODDs that Defendant sold to other customers.

150. The following chart compares the price of half-height CD-RW drives sold by one Defendant to Dell and HP against the price of the same products sold to the Defendant's other customers:



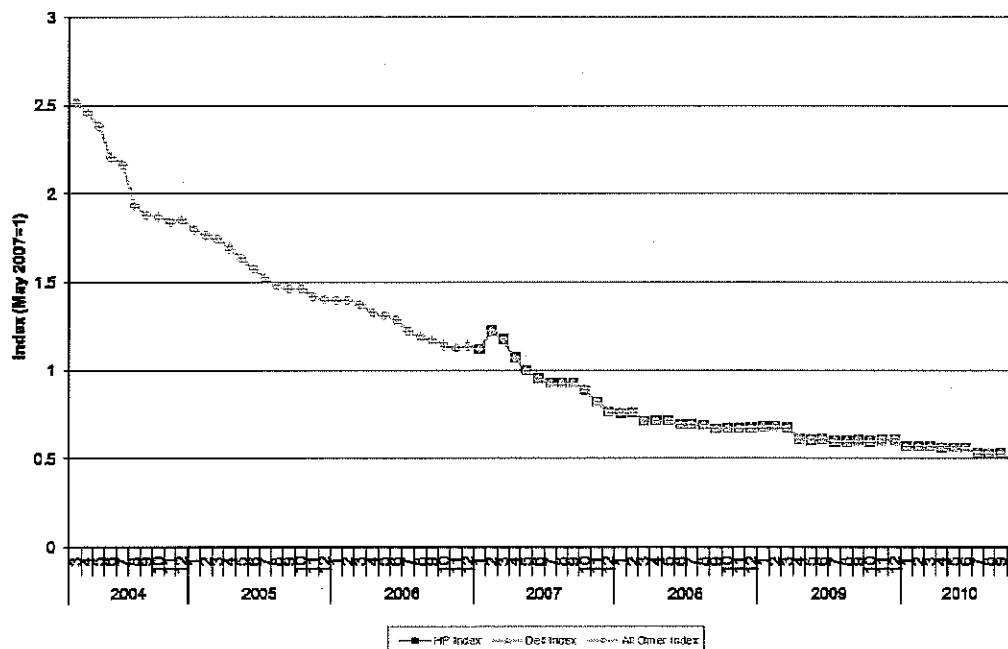
151. The following chart compares the price of half-height combo drives sold by one Defendant to Dell and HP against the price of the same products sold to the Defendant's other customers:

Price Indexes for HH COMBO



152. The following chart compares the price of slim DVD-RW drives sold by one Defendant to Dell and HP against the price of the same products sold to the Defendant's other customers:

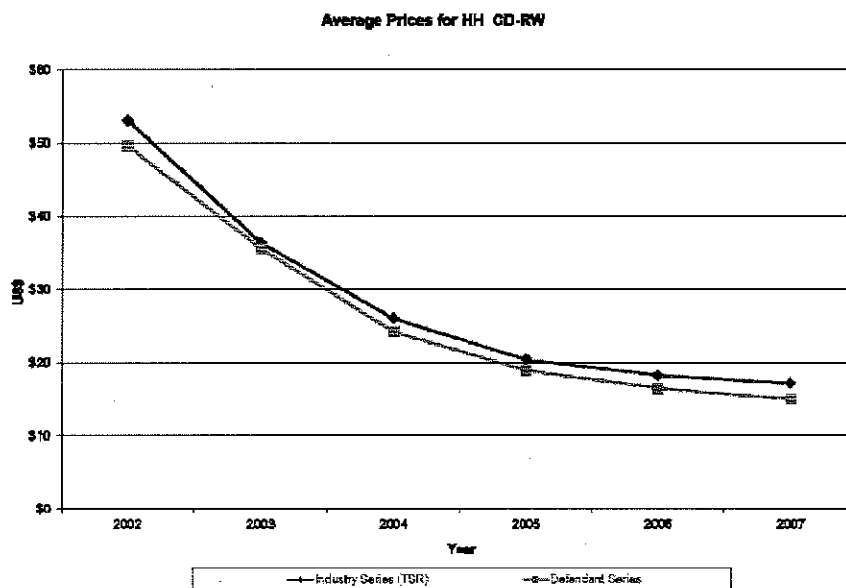
Indexes for SLIM DVDRW



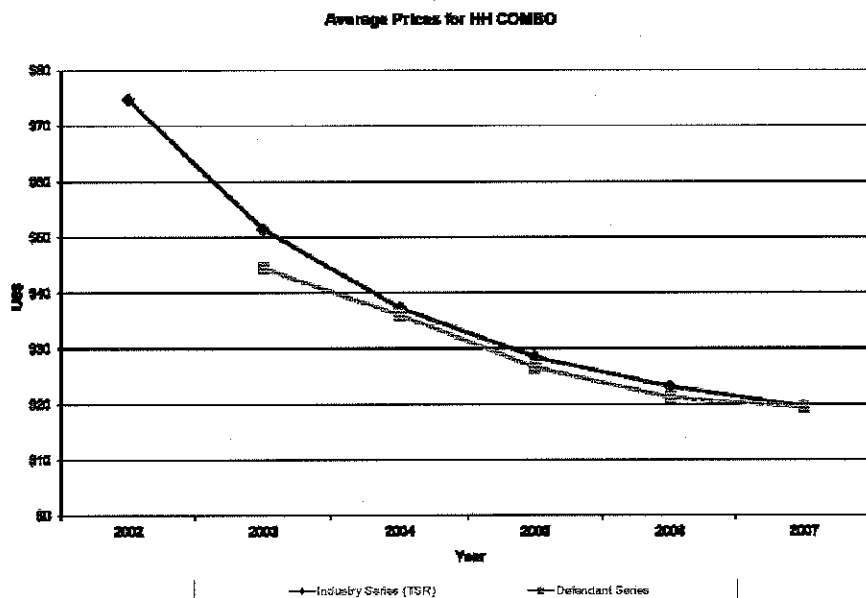
153. Thus, even if Defendants' conspiracy to stabilize ODD prices were limited to the largest customers, Dell and HP, it had a broad and pervasive impact, raising the price to all customers and market segments purchasing ODDs.

154. The average sales prices for various ODDs from the Defendant upon whose transaction sales data the above indices were based, are also highly correlated with the average prices in the ODD industry as a whole.

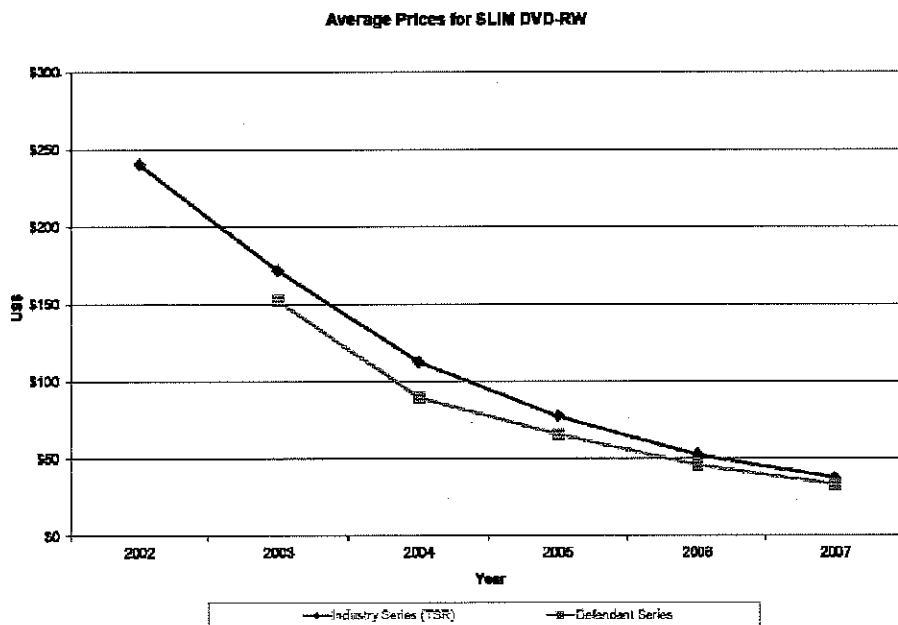
155. The following graph depicts the average prices for half-height CD-RW drives for one Defendant against industry prices:



156. The following graph depicts the average prices for half-height combo drives for one Defendant against industry prices:



157. The following graph depicts the average prices for slim DVD-RW drives for one Defendant against industry prices:



158. Thus, regardless of whether the overt acts in furtherance of Defendants' conspiracy went beyond sales to just HP and Dell (which Plaintiffs allege that it does), the

1 inflation of prices to Dell and HP alone would have been sufficient to result in an inflation of
2 Defendants' prices throughout the ODD market.

3 **2. Defendants' Conspiracy Caused Consumers to Pay Supra-Competitive Prices**

4 159. As with most high-tech information technology products, dramatic declines in
5 price and improvement in quality occur over time. An effective conspiracy to restrain trade
6 significantly slows what would otherwise be a more rapid decline in quality-adjusted price, rather
7 than increase the price in absolute terms. Put another way, the price is higher relative to a but-for
8 world of more rapid price decline.

9 160. ODDs are priced in a highly integrated global market. As producers reported to
10 the European Union during a merger review, "With respect to the geographic product market, the
11 parties submit that the overall PC ODD supply market is world-wide or at least EEA-wide in
12 scope. Prices do not vary significantly in world regions."

13 161. Price movements in global markets can be measured using two producer price
14 indexes for ODDs manufactured in Japan, converted to a common currency basis (dollars). These
15 price indexes are better measures of price trends than simple average sales prices, since they
16 control for differences in the mix of products being produced, and hold constant the quality and
17 types of products being produced, over time.

18 162. One of the two Japanese producer price indexes holds the sales mix of products
19 constant using 2005 market shares, and measures changes in the price of this 2005 "bundle" of
20 ODDs from one time period to the next. A second Japanese price index updates the weights from
21 one year to the next, beginning from a 2005 base. The latter calculation using "chain weights" is
22 considered a better measure of price change for products like ODDs which are undergoing
23 technological and quality changes.

24 163. Differences in weights as they evolve over time are likely to create some
25 differences in movements between the two price indexes. The following table compares the
26 movement in these two price indexes, converted to a common dollar basis, over time. CAGR
27 refers to the compound annual growth rate. As expected, the chain weighted price index shows
28

price declines that are slightly greater, reflecting its more accurate tracking of movements in market prices due to introduction of newer and more innovative products:

ANNUAL RATES OF PRICE CHANGE IN ODDs		
	CAGR	CAGR
	2001-2004	2004-2009
ODD Chain Weight	-22.7%	-9.5%
ODD Fixed Weight	-21.5%	-6.9%

164. Despite differences in index weights, the two indexes display a remarkably consistent pattern. This data shows a clear trend toward slower rates of price declines over the period 2004 to 2009.

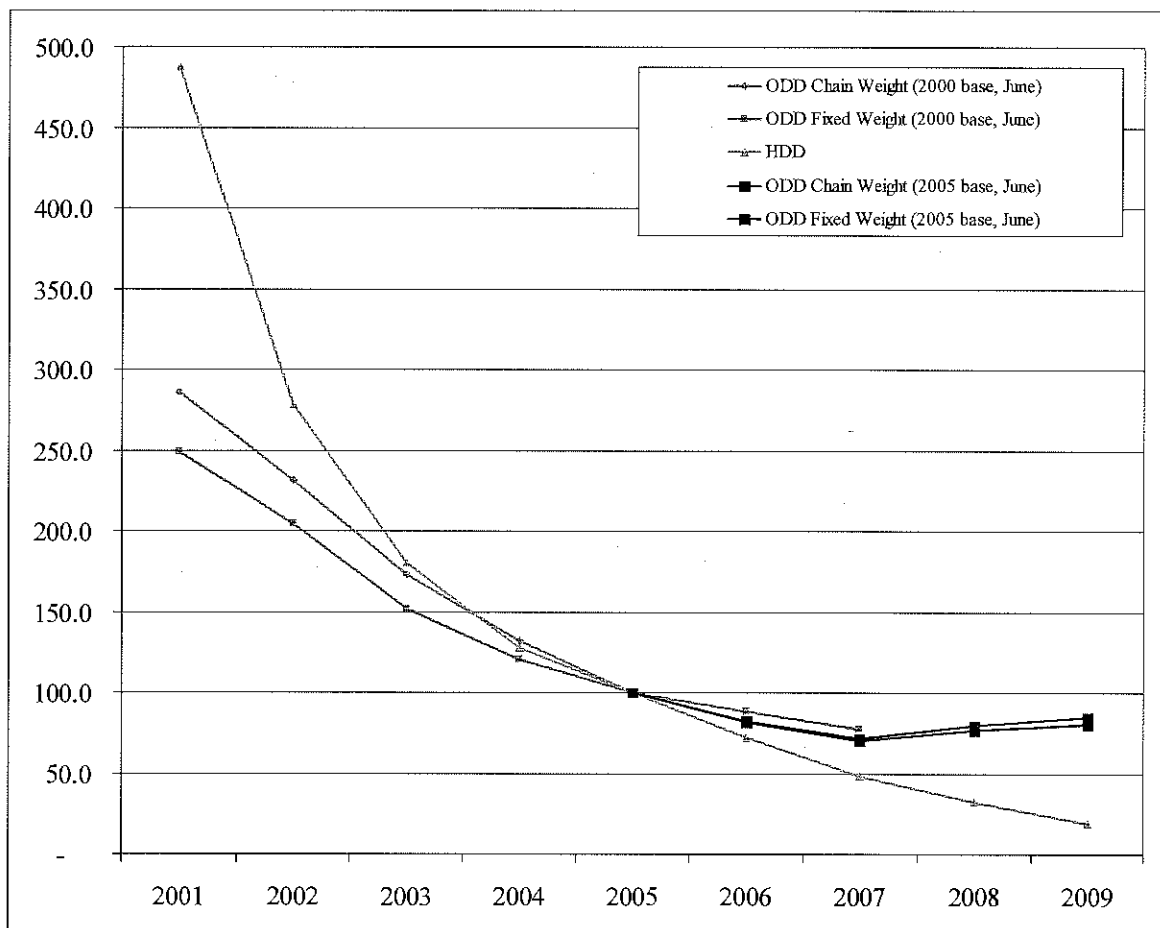
165. This ODD price index is most usefully compared to the price index for a comparable high tech product. Like ODDs, hard disk drives (with magnetic, non-removable media, HDDs) utilize precision electro-mechanical components, with a significant semiconductor content, and are also used for digital data storage in computer systems. There was also a significant increase in concentration from 2000 to 2007 in hard disks, but with no patent pool with production and pricing information-sharing, no prohibitive, entry-preempting royalty, and no price-fixing conspiracy:

ANNUAL RATES OF PRICE CHANGE IN ODDs VERSUS HDDs		
	CAGR	CAGR
	2001-2004	2004-2009
ODD Chain Weight	-22.7%	-9.5%
HDD	-36.1%	-31.5%

166. This data suggests that after declining at very high rates prior to the emergence of an effective ODD conspiracy in 2004, price declines for the two types of data storage systems changed by very different amounts during the alleged conspiracy period, from 2004 to 2009. HDD prices continued to decline at similar rates as over 2001 to 2004, while price declines in ODDs not only came to a complete halt in 2008, but prices even increased substantially during the 2008 to 2009 period.

167. The following figure provides a graphic comparison of these price declines for optical disk storage versus rates of decline in dollars per gigabyte of hard disk storage over the 2001-2009 period. The difference in rates of decline in ODD prices before and after the start of the conspiracy is obvious and compelling, while the continuing and virtually unchanged, sharp decline in hard disk drive storage prices is equally evident:

**PRICE INDEXES FOR OPTICAL STORAGE VERSUS HARD DISK STORAGE
2001-2009**



168. The most recent optical disk technology used by consumers, Blu-ray disc players, continues to be only a small part of the overall ODD market. Though Blu-ray player prices had declined from stratospheric 2006 levels (an average sales price of \$636 per BD video player) to a less daunting (\$193) price level by 2009, developments in 2008 suggest that the same collusive conduct among the Defendants that had halted price competition for the mainstream DVD

1 technology, was also being felt in the small but growing market for the newer technology Blu-ray
2 players.

3 169. The year 2008 marked the end of a vigorous competition between Blu-ray players
4 and the competing technological approach to high definition video, HD-DVD. The HD-DVD
5 format had previously been promoted by Toshiba, with HD-DVD compatible players also
6 produced by its TSST joint venture partner Samsung, as well as LG Electronics, NEC, Sanyo,
7 Thomson, and Onkyo. Toshiba had been aggressive in promoting the format by pricing its HD-
8 DVD players several hundred dollars below prices for comparable Blu-ray players, producing
9 considerable downward pressure on latest generation video players. As one industry observer
10 noted:

11 Toshiba clearly understood the importance of penetration pricing in
12 a standards war. HD-DVD players entered the market at half the
13 price of the Blu-ray players and remained priced consistently
14 throughout the war. Alone, this may have tilted the market towards
15 crowning the HD-DVD format.

16 But Sony also understood this issue. The company was at a cost
17 disadvantage to HD-DVD in that the Blu-ray players cost more to
18 produce. To overcome this, Sony bundled Blu-ray with PS3.

19 170. Finally, in 2008, Toshiba gave up on its effort to establish the HD-DVD format.
20 As soon as the competitive pressure was removed, prices for Blu-ray players surged upwards. As
21 Information Week reported:

22 HD DVD has been dead less than four weeks, yet it appears prices
23 already have started to rise on DVD players supporting the
24 surviving high-definition format Blu-ray.

25 The average price in January of the top 10 Blu-ray players on
26 PriceGrabber.com, a comparison-shopping site, was \$467. In
27 February, the month Toshiba said it would no longer lead the
28 charge for HD DVD, the average price jumped to \$604.

Some of the increase was due to the introduction of expensive
players with features that went above the norm, Darren Davis, VP
of product marketing for PriceGrabber, said Thursday. Taking
away that factor, however, still left an increase between \$20 and
\$50 on most players in February.

Even though Blu-ray players no longer have to compete with
cheaper HD DVD devices, manufacturers would be smart to keep
prices low. "Consumers are not going to jump into the market yet,"

1 Davis said. "The demise of HD DVD, if anything, is going to delay
2 Blu-ray adoption, given the increase in prices."

3 While raising prices could offer short-term gain for manufacturers
4 by squeezing more money from early adopters, it would delay
adoption among more price-sensitive mainstream consumers, Davis
said.

5 171. A blogger on the widely read Gizmodo Blog observed that:

6 I suppose that it is not all that surprising to find out that without
7 competition from the HD DVDs camp, prices for Blu-ray players
8 have gone up. According to data collected by Pricegrabber.com,
9 Blu-ray players have hit a high average of \$400 per unit for the
year – about the same price they were at this time last year. This
comes after the aggressive price cuts Blu-ray manufacturers
employed at the height of the HD DVD battle. While these players
probably would have been \$1000 without a format war (thank
10 Toshiba for that one) these prices are not moving in the right
direction.

11 172. CNET News noted the immediate increase in prices after the removal of HD-DVD
12 from the market:

13 In the three short weeks since Toshiba announced that it was
14 pulling the plug on the high-definition technology, prices for
standalone players using the rival Blu-ray format have been headed
15 north. In fact, as noted by PriceGrabber.com, Blu-ray prices are at
their high point for the year, at an average of about \$400 apiece for
16 the devices.

17 173. Toshiba soon found a way to capitalize on its abandonment of the competing HD-
18 DVD alternative. In early 2010, the formation of a patent pool for Blu-ray technology was
19 announced by its four members, Mitsubishi, Thomson, Warner Brothers, and Toshiba. Toshiba
20 was selected to operate the new BD4C patent pool, which goes into operation alongside a second
21 patent pool announced by Panasonic, Sony, and Philips in 2009.

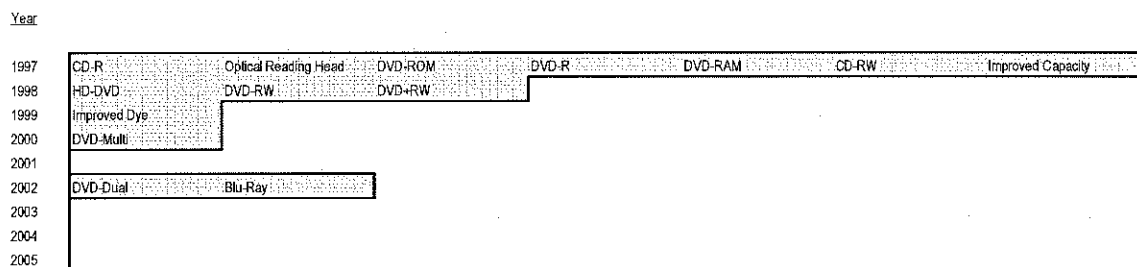
22 **3. Defendants' Conspiracy Harmed Consumers by Causing Decreased**
23 **Technological Innovation**

24 174. Defendants' conspiracy caused a second harm to consumers, a decline in the
underlying rate of technological innovation – which ultimately leads to declines in quality-
25 adjusted price as new and qualitatively superior products are introduced, then adopted by
26 consumers. Empirical economic studies have previously found that formation of a patent pool,
27 historically, has been associated with a slowing in the rate of innovation in the industry
28

1 producing the products utilizing the pooled patents. The same phenomenon seems to have
 2 happened after the patent pools were formed in ODDs.

3 175. The following figure tracks major introductions of new technological changes in
 4 the ODD industry over the 1997-2005 period. The clustering of major innovations before 2003 is
 5 notable, and the absence of major new innovations with an impact on the industry since 2002
 6 quite remarkable:

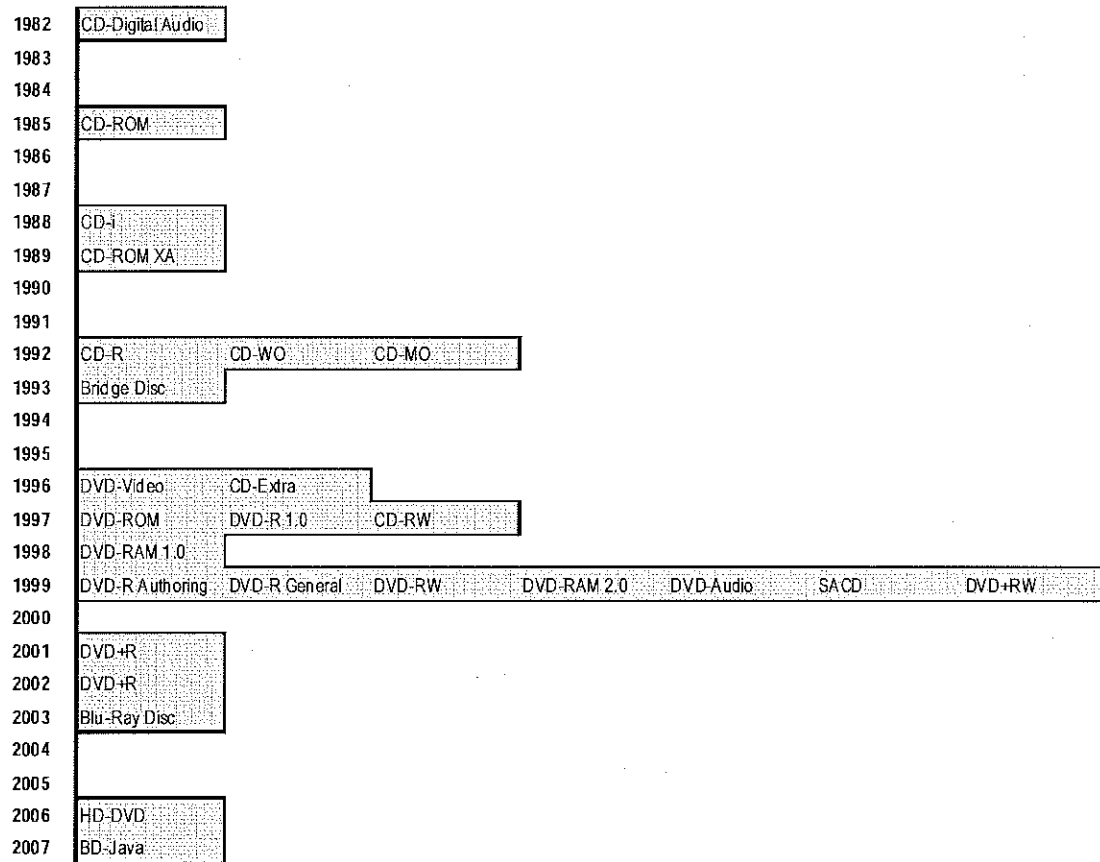
7 **ODD TECHNOLOGY EVOLUTION, 1997-2005**
 8 **TECHNOLOGY INTRODUCTIONS**



14 176. The following figure catalogues the first introduction into the marketplace of
 15 players based on new ODD standards. As expected, the market introductions depicted in the
 16 figure lag behind the technology development by some time. The pattern is very consistent,
 17 however, with a large fraction of all new player introductions occurring prior to 2003, and only
 18 two new players (players for the ill-fated HD-DVD standard, and Blu-ray Java players)
 19 introduced after 2003. A slackening in the pace of innovation seems to have coincided with the
 20 formation of the patent pool and joint ventures:

MARKET INTRODUCTION OF PLAYERS FOR NEW OPTICAL DISK TECHNOLOGIES, 1982-2007

Year



177. The scheme resulted in a slowdown of patent applications in the newest high definition video player technology. The following tables count patents filed by the five companies with the largest numbers of United States patents in Blu-ray and HD-DVD disk technology, respectively, over the years 2000 to 2007. Again, the data suggest a decline over time:

TOP 5 FIRMS THAT FILED BLU-RAY TECHNOLOGY-RELATED PATENTS 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007	Total
Philips	1	2	3	10	3	1	0	0	20
LG	0	0	0	13	11	1	0	0	25
Matsushita	0	0	1	20	23	4	8	0	56
Samsung	0	0	0	16	14	12	13	6	61
Sony	0	3	2	4	11	13	9	1	43
Total US Patents Filed	1	5	6	63	62	31	30	7	205

TOP 5 FIRMS THAT FILED HD-DVD TECHNOLOGY-RELATED PATENTS, 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007	Total
General Electric	0	1	1	3	3	0	0	0	8
LG	2	3	4	4	1	0	1	0	15
Matsushita	1	2	2	2	3	1	3	0	14
Samsung	14	12	11	10	11	5	11	5	79
Target Technology Co, LLC	0	0	0	0	2	3	3	0	8
Total US Patents Filed	17	18	18	19	20	9	18	5	124

178. In summary, a period of rapid introduction of new ODD product technologies occurred prior to, and right after, the formation of the ODD patent pools in 1998 and 1999. Shortly thereafter, a period of rapid and substantial increase in concentration within the ODD industry also occurred. These twin developments were followed by a paucity of new ODD technology introductions.

179. Technological innovation is often stimulated as a by-product of price competition in high tech sectors, as introduction of new, innovative, and at least temporarily more profitable products provides an attractive alternative to competing for sales by slashing prices and margins on

1 more mature products. Reducing the pressure of price competition removes some of the pressure to
2 innovate.

3 180. Reduced price competition resulting from a price-fixing conspiracy further reduced
4 rates of technological innovation that were already slowing as a consequence of patent pool
5 formation and lessened industrial competition. Diminished rates of technical innovation make
6 maintenance of a stable price-fixing cartel easier. A slowdown in the rate of technical innovation
7 and a reduction in the rate at which prices are falling are mutually reinforcing. Both factors are
8 associated with the operation of this price-fixing conspiracy, and both factors cause harm to
9 consumers of ODDs.

10 **4. The Inflated ODD Prices Were Passed-Through to Consumers**

11 181. Defendants' conspiracy to raise, fix, or maintain the price of ODDs at artificial
12 levels resulted in harm to Indirect Purchaser Plaintiffs and the proposed classes because it resulted
13 in them paying higher prices for ODD Products than they would have in the absence of
14 Defendants' conspiracy. The entire overcharge for the ODDs at issue was passed on to Indirect
15 Purchaser Plaintiffs and members of proposed classes.

16 182. ODDs are commodity products, with functionally equivalent products available
17 from Defendants, which manufacture ODDs pursuant to standard specifications.

18 183. An ODD is purchased by a consumer as a stand-alone device or as a substantial part
19 of an ODD Product. When an ODD is purchased by consumers as a stand-alone device, the device
20 itself is directly traceable to the specific manufacturing Defendant. When an ODD is purchased by
21 a consumer as part of an ODD Product, it is a distinct, physically-discrete hardware element of the
22 end-use product and is identifiable by a specific, discrete part or model number that permits
23 tracing. ODDs are identifiable and traceable throughout the chain of the distribution to the end
24 user. They do not undergo any alterations as they move through the chain of distribution.

25 184. The indirect purchaser buys an ODD through one of two distribution chains, either
26 from the direct purchaser OEM, or through a reseller such as a retailer. Thus, an ODD follows a
27 traceable physical chain from Defendants to the OEMs, to the purchasers of ODD Products.

1 Tracing can help show that changes in the prices paid by direct purchasers of ODD affect prices
2 paid by indirect-purchasers of the ODDs themselves, or ODD Products.

3 185. The OEM and the retail markets of ODDs and ODD Products are subject to
4 vigorous price competition. The direct purchaser OEMs and retailers have very thin net margins.
5 They are therefore at the mercy of their component costs, such that increases in the price of ODDs
6 lead to quick, corresponding price increases at the OEM and retail levels for stand-alone ODDs and
7 ODD Products.

8 186. As a result, the inflated prices of ODDs resulting from Defendants' price-fixing
9 conspiracy have been passed on to Plaintiffs and the other members of the proposed classes by
10 direct-purchaser manufactures, distributors, and retailers.

11 187. ODDs make up a substantial component of the cost of ODD Products. The retail
12 price of an ODD Product is determined in substantial part by the cost of the ODD it contains.

13 188. Microeconomic theory teaches that the only situations in which precisely zero pass
14 through occurs is when an industry faces a perfectly elastic demand for its product (i.e., the price
15 was fixed, with demand dropping to zero with an infinitesimal price increase, and expanding
16 infinitely if price were to drop infinitesimally), or if supply was perfectly inelastic (i.e., if even a
17 very large increase in price for a product was incapable of stimulating additional supply).⁴⁸ These
18 possibilities are considered implausible by economists. Either scenario is at odds with the nature of
19 the computer and consumer equipment industries. Existing empirical studies of the computer and
20 electronics industry have concluded that demand is *not* infinitely elastic. Therefore, at least a
21 partial pass through of an increase in the cost of ODDs into the price of computer and consumer
22 electronic equipment – and consequent harm to class members – is the predicted outcome of a
23 successful price-fixing conspiracy.

24 189. To the extent that distributors, wholesalers, and retailers selling to consumers or to
25 others in the distribution chain price their sales as their cost plus a fixed markup, this will create an
26

27 ⁴⁸ The usual hypothesis that is commonly examined in empirical pass through studies is
28 whether pass through exceeds, falls short of or equals 100 percent.

1 additional reason for pass through to exceed 100 percent through these channels.⁴⁹ Further, because
 2 local retailers ultimately compete with direct sales to purchasers by computer manufacturers,
 3 competitive forces would likely work to equalize end-purchaser prices between channels, after
 4 controlling for the value of differences in support across different distribution channels. This would
 5 tend to push the total pass-through rate from costs to end-purchaser pricing above 100 percent,
 6 since manufacturers could not sustain a pricing policy to distributors that did not cover their costs,
 7 and an additional fixed markup on top of distributor cost would result in a total pass-through rate to
 8 final consumers in excess of 100 percent.

9 190. Thus, the extent to which input cost increases are passed through into output prices
 10 is entirely an empirical issue, and it is an area in which methods of empirical analysis are well
 11 established. Based on both theory and the published studies in this area, it is likely that the pass-
 12 through rates of ODD costs into computer and consumer electronics prices will exceed 100
 13 percent, a situation known as “overshifting.”

14 191. In particular, it is undisputed that overshifting is possible in markets with many
 15 suppliers of differentiated products and easy entry and exit, an environment known as
 16 “monopolistic competition.” Indeed, pass through in excess of 100 percent would actually be
 17 expected in industries where firms produce differentiated products in competitive conditions, and
 18 face economies of scale – that is, where their average cost of producing a product declines with
 19 their level of output. In particular, as noted next, in competitive industries with differentiated
 20 products and relatively easy entry and exit (monopolistic competition), when there are economies
 21 of scale, overshifting will be the rule, not the exception. Empirical studies by economists have
 22 characterized the personal computer industry as an industry which fits this description. For this
 23 reason, it is likely that pass through is greater than 100 percent, in the market conditions that
 24 prevail for most, if not all, types of mass market computer and consumer electronics equipment.

25 ⁴⁹ For example, if a wholesaler prices its product at manufacturer sales price plus 10 percent,
 26 and a retailer prices its product at wholesale plus 10 percent, the total pass through to the final
 27 consumer will be 121 percent (i.e., 110 percent times 110 percent) of manufacturer sales price.
 28 Certain distributor costs, like the costs of holding inventory, and “shrinkage,” may be
 approximately proportional to the value of the products held, and thus be one factor creating this
 pricing policy.

1 192. Thus, Plaintiffs and other indirect purchasers have been forced to pay supra-
2 competitive prices for ODDs and ODD Products. These inflated prices have been passed on to
3 them by direct purchaser manufacturers, distributors, and retailers.

4 **D. Specific Characteristics of the ODD Market Made It Ripe for Collusion**

5 193. The ODD industry has several characteristics that facilitate a price-fixing
6 conspiracy, including: (1) increasing concentration in the makeup of the industry; (2) the existence
7 of significant barriers to entry; and (3) ease of information sharing and cartel enforcement through
8 trade group meetings.

9 **1. The ODD Market Experienced a Dramatic Increase in Concentration**

10 194. In the period from 2001 to 2004, the ODD industry witnessed an increase in
11 concentration, and a reduction in competition. Significant barriers to entry facilitated this increase
12 in concentration, which in turn enabled the collusion that is the subject of this complaint. The
13 formation and operation of patent pools for DVD technology, created just prior to this period of
14 rapidly increasing concentration, played a critically important role in both creating entry barriers to
15 potential competitors, and in providing price and output monitoring mechanisms that facilitated the
16 operation of a successful price-fixing conspiracy.

17 195. The following table calculates the change in the Herfindahl-Hirschman Index
18 (“HHI”) of concentration over the period from 2001 to 2008. In 2001, an HHI well under 900
19 characterized the degree of concentration among producers of ODDs. By 2005, the HHI had more
20 than doubled, to over 1950. In 2001, according to Department of Justice guidelines, the ODD
21 industry would have been considered “unconcentrated.” In 2005, it would have been considered
22 “highly concentrated.” Concentration remained at about this same level in 2008, the last year for
23 which data is readily available.

HERFINDAHL-HIRSCHMAN INDEX (HHI) OF CONCENTRATION FOR ODD MARKET									
2001 Entity	2003 Entity	2005 Entity	2001 Mkt Share (%)	2003 Mkt Share (%)	2004 Mkt Share (%)	2005 Mkt Share (%)	2006 Mkt Share (%)	2007 Mkt Share (%)	2008 Mkt Share (%)
Hitachi/LG	Hitachi/LG	Hitachi/LG	18.8	24.0	28.0	25.6	26.0	30.8	27.9
Samsung	TSST	TSST	13.1	19.0	18.0	21.8	18.9	24.2	23.6
Toshiba			5.3						
Lite-On	Lite-On	Lite-On (PLDS)	10.6	16.0	16.0	26.3	16.9	11.5	14.5
BenQ	PBDS		5.1	7.0	6.0				
Philips			3.4						
Sony	Sony	Sony NEC Optiarc	2.4			7.1	9.9	9.3	15.6
NEC	NEC		3.3		4.0				
MKE/Pana- sonic			4.5	5.0	6.0	8.4	9.1	8.6	7.0
Pioneer			1.9		4.0	4.4	5.7	6.0	6.3
TEAC			6.4	3.0					
BTC			4.7	4.0					
AOpen			2.4						
Mitsumi Electric			2.0						
All Others			16.1	22.0	18.0	6.4	13.5	9.6	5.1
			2001	2003	2004	2005	2006	2007	2008
HHI upper bound			847	1358	1540	1990	1609	1921	1910
HHI lower bound			816	1292	1468	1962	1532	1863	1878
Market Share of DVD Pool Members, Affiliates (%)			49	55	66	94	87	90	95

196. The members or controlled subsidiaries of the two DVD patent pools (*see* pages 75-72, *infra*), all of whom are alleged to have participated in the ODD price-fixing conspiracy, accounted for less than half of industry sales in 2001. By 2004, this had jumped to 66 percent, and by 2005 to 94 percent of ODD sales globally. In 2008, ODD producers affiliated with (and controlled by) pool members continued to account for 95 percent of worldwide ODD sales.

197. By 2004, the most significant effects of this consolidation within the ODD industry had been felt. The shrinking number of producers is all the more remarkable given the growth in the size of the ODD market from 2001 through 2004, as the following table demonstrates:

GLOBAL ODD SALES, 2001-2009									
	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blu-ray (in millions)	0	0	0	0	0	0	1	5	14
DVD-W (in millions)	2	5	25	55	124	179	238	235	215
Other (in millions)	177	198	203	191	178	123	92	72	53
Total Units (in millions)	179	203	228	246	303	301	331	312	281
Total \$ (in billions)	9.3	9.8	10.5	9.8	10.4	9.6	9.3	7.9	6.8

198. One significant feature of this process was that the consolidations did little to change the actual pattern of outsourced manufacturing, which largely continued unchanged, as described above. Instead, the consolidation simply reduced the number of ODD firms competing horizontally and shrank the number of unique brands and products sold in the marketplace. The consolidation also reduced the number of firms developing new products in direct competition with one another in the marketplace. The net result was a significant increase in concentration, decline in competition, retardation of innovation, and facilitation of collusion by ODD producers.

a. Hitachi and LG Electronics Form Hitachi LG Data Systems (HLDS)

199. The drive toward consolidation was kicked off in late 2000, when Japanese ODD producer Hitachi merged its optical disk operations with LG Electronics, of Korea. The joint venture, Hitachi LG Data Systems (HLDS), was dedicated to design, development, and marketing. Actual manufacturing was contracted out to the parent corporations. The joint venture also had royalty-free access to the patents of the parents. Hitachi acquired a 51 percent stake of HLDS, while LG Electronics acquired the remaining 49 percent. After implementation of the transaction, Hitachi and LG Electronics jointly controlled the operations of HLDS. The Chief Executive Officer

1 of the joint venture was Korean, from LG Electronics, while the Chief Financial Officer, from
2 Hitachi, was Japanese.

3 200. Hitachi, however, effectively controlled the operation, through both its ownership
4 and its control of key technologies. Indeed, Hitachi's 51 percent ownership of the joint venture was
5 critical to its success, since its position as a Hitachi affiliate gave it access to the benefits of
6 Hitachi's cross-licenses with other ODD patent holders, and Hitachi's membership in the DVD6c
7 patent pool.

8 201. As a Japanese study of the industry concluded:

9 It is very important for the industry of the catch-up countries to
10 understand the reason why the percentage of Hitachi's investment to
11 HLDS is 51%, and why Mitsubishi's investment to Digitek [a similar
12 joint venture between Mitsubishi and Funai Electric] is 51%. The
13 51% from Hitachi means that HLDS is consolidated subsidiary
14 company of Hitachi and thus all the patent royalty issues are
15 automatically handled by Hitachi. It is said that the actual royalty fee
16 of the DVD business has been significantly decreased because
17 Hitachi has established patent claim to rank with other patent
18 holders, and moreover Hitachi has many cross-licensed partner firms
19 in the world.

20 202. Even for less technologically complex consumer DVD players, which could feasibly
21 be assembled and manufactured by new entrants in Taiwan and China, this royalty load rapidly
22 became a major economic factor limiting their ability to compete successfully against the
23 incumbent patent pool members. Prior to 2005, Japanese economists studying the industry had
24 noted:

25 It will become very difficult for Chinese firms to run the DVD
26 business by paying all of the royalty which have been claimed from
27 front runner countries, because the percentage of the relative amount
28 of the royalty will become unreasonably higher and higher as the
29 retail price of the DVD player becomes lower and lower. It is a
30 noteworthy fact that, in a case of a major DVD manufacturer in
31 Taiwan, the ratio of the royalty was estimated to be over 50% of the
32 total overhead in year 2004 . . . and have become almost impossible
33 to continue the business if they would keep paying all of the claimed
34 royalty.

35 203. The same economists noted that:

36 According to industry analysts, total sum of the royalty claimed
37 against Chinese firms is estimated to be well over 10 dollars per a
38 DVD player even though the retail price of the player in US market
39 has dropped to 30-50 dollars in 3Q/2005, while royalty claimed

1 against Japanese firms is estimated to be 2-4 dollars because the
2 firms are major license holders in the DVD forum. Furthermore, the
3 street price of Japanese brand DVD player is 50-80 dollars, which is
4 50% higher than that of Chinese brand products.

5 204. The manufacturing cost advantages of the Chinese firms were offset by the very
6 high royalties they needed to pay in order to sell the products abroad. Japanese firms, on the other
7 hand, faced higher overhead costs if they chose to continue funding technological development, but
8 paid minimal royalties. After 2005, with technological progress in semiconductors and optical
9 devices, and economies of scale continuing to dramatically reduce costs of the materials, parts, and
10 chips needed to manufacture a DVD drive, the costs of the royalties came to dominate the costs of
11 manufacturing an ODD for potential competitors in ODDs without low cost access to the ODD
12 patent pools. There is also evidence that the pace of technological development of ODDs
13 slackened, as pool members slowed the pace of introductions of new ODD technology, further
14 improving the cost advantage of incumbent pool members by reducing research and development
15 costs.

16 205. Hitachi's ability to manufacture at a much lower cost through its joint venture with
17 LG Electronics, yet still avoid payment of increasingly burdensome royalties (as the fixed size of
18 the minimum royalty increased its importance relative to a falling ODD price) by virtue of its 51
19 percent ownership of the joint venture giving it Hitachi's preferred position inside the patent pool,
20 was critical to the business success of what became a very profitable joint venture.

21 206. Japanese economists have noted:

22 Since 2003, only three years after the joint venture company has
23 started, HLDS has turned into one of the most profitable subsidiary
24 companies of Hitachi group. It has been said that without moving on
25 to the alliance, Hitachi would have been forced to withdraw from the
26 optical storage industry. The joint venture company between
27 Mitsubishi Electric and Funai Electric also shows similar success
28 story that Funai is exceptionally a profitable firm among the DVD
suppliers in Japan because Mitsubishi Electric is the majority (51%)
among the investors and is one of the major license holders in the
DVD Forum.

29 **b. Philips and BenQ Form Philips BenQ Digital Storage (PBDS)**

30 207. This model was quickly copied by others. In 2001, Japan's JVC, another patent pool
31 member, formed a similar 51 percent to 49 percent joint venture with Taiwan's Lite-On. As with

1 HLDS, the patent pool member, JVC, held the controlling interest (though in the case of HLDS,
2 LG Electronics later was ultimately allowed to join a patent pool).

3 208. In early 2003, Taiwanese ODD producer BenQ and Philips, formed a joint venture,
4 Philips BenQ Digital Storage (PBDS). The jointly-owned company would develop, design, and
5 market ODDs; all manufacturing would be contracted out to BenQ. While the joint venture
6 targeted data storage applications, it explicitly noted that it “may later include optical storage
7 devices for consumer applications.”

8 **c. Toshiba and Samsung Form Toshiba Samsung Storage Technology**
9 **(TSST)**

10 209. Also in 2003, ODD producers Samsung and Toshiba concluded an agreement to
11 integrate their ODD operations into a single entity, Toshiba Samsung Storage Technology (TSST).
12 As was the case with the HLDS and PBDS, the joint venture was for design, development, and
13 marketing efforts; all manufacturing was to be contracted out to Samsung. Toshiba and Samsung
14 jointly control the venture. Although Toshiba held the majority of shares in the joint venture (51
15 percent, with Samsung holding the remaining 49 percent), Samsung retained veto rights on
16 strategic decisions. Therefore, both parents jointly retain the possibility to exercise decisive
17 influence over the joint venture.

18 210. As Korea’s national investment promotion agency describes on its web site:

19 Essentially, the two companies had agreed to spin-off their ODD
20 businesses, and transfer them to the joint venture. Mirroring the
21 Hitachi/LG deal, majority control was vested in the Japanese parent
22 with 51 percent of the equity compared to 49 percent for the Korean
23 partner. Again, company headquarters would be in Japan, this time,
24 within Toshiba’s head office in Kawasaki. Again the Japanese parent
25 company would bring technical know-how to the venture, as well as
26 international brand power supported by a global sales and service
27 network. Manufacturing also, in the case of TSST, would be the
28 province of the Korean partner. With TSST Korea head office at the
Samsung Digital Complex in Suwon, Gyeonggi Province, production
for the joint venture was consigned to the automated Samsung ODD
plant in Gumi, North Gyeongsang Province. TSST operates a
similarly well-appointed factory in Manaus, Brazil, and at its
Samsung Electronics Phils. Mfg Corp (SEPHIL), facility at Calamba
Premier International Park, Calamba City, Philippines.

HEDGING BETS

In fact, the articles of the joint venture stipulate that its purpose is the design, development, marketing and sales of ODDs, with manufacturing left out of the arrangement, in effect, outsourced to the Samsung plant. With research and development plus intellectual property rights secured under a long term agreement, TSST was given access to all necessary resources from its parent companies to compete in the global ODD market. TSST supplies ODD models to its Japanese and Korean parents who then market them under their own brands, in the same manner that an OEM operates. At the same time, as is the case with [HLDS], the parent companies are better able to respond and meet shifting demands by splitting fabrication and development costs.

d. Sony and NEC Form Sony NEC Optiarc

211. Prior to 2005, Sony and NEC individually designed and manufactured ODDs. According to company reports in 2005, the optical disc drive businesses of Sony and NEC generated a combined revenue of \$1.8 billion in the fiscal year from April 2004 to March 2005. According to the companies, at the time of the Sony NEC Optiarc joint venture, the companies had an estimated ODD market share of around 20 percent.

212. In 2005, ODD producers NEC and Sony announced an agreement to merge all ODD activities of their two companies (presumably including the design and development of loaders for use in consumer products) in a joint venture, Sony NEC Optiarc, Inc. The new joint venture undertook all development, design, marketing and sales related to ODDs; all manufacturing (except a small amount of manufacturing of magneto-optical drives by Sony) was to be subcontracted out to third parties. Sony held a 55 percent ownership of the shares in the joint venture, while NEC owned the remaining 45 percent of the share capital. Sony also appointed the majority of the Board of Directors (four out of seven). NEC, however, retained the right to veto certain decisions. In addition, certain sensitive matters which require resolution by a vote of the board of directors also required an affirmative vote by at least one director appointed by NEC. Thus, both parent companies retained control of the Sony NEC Optiarc joint venture.

213. The Sony NEC Optiarc parent companies, Sony and NEC, continue to exert substantial operational control over the subsidiary, and retain key technology development efforts

1 outside the joint venture, not unlike the 2000 HLDS venture's organizational template. Japan's
2 Nikkei economic news service reported that:

3 Sony and NEC signed the agreement in expectation of synergy in
4 both technologies and marketing. The companies intend to
5 complement each other's technologies with Sony's expertise in
6 optical heads and NEC's signal processing LSIs. As for marketing,
7 the companies aim to extend the reach of their products to North
8 America and Europe, where Sony and NEC respectively boast solid
9 sales. However, parent Sony and NEC will separately continue their
10 research and development of optical disc elemental technologies in
11 house.

12 214. Sony NEC Optiarc's founding board of directors was composed entirely of senior
13 executives from NEC and Sony. As a February 2006 press release from Sony announcing the joint
14 venture stated:

15 Sony Corp. and NEC Corp. have announced that they reached a
16 definitive agreement to establish a joint company named "Sony NEC
17 Optiarc Inc." to integrate their optical disc drive businesses. Shinichi
18 Yamamura, current Deputy President, Video Business Group, Sony,
19 will become Representative Director and President of the new
20 company. Eiichi Ichikawa, current General Manager, Computer
21 Storage Products Division, NEC, will become Vice President. In
22 addition to these two full-time directors, the new company's board of
23 directors includes three and two adjunct members from Sony and
24 NEC, respectively.

25 215. The executives went on to senior positions in their home companies. In addition to
26 Sony NEC Optiarc's founding Chief Executive Officer, Yamamura, who came from Sony, and
27 Sony NEC Optiarc's founding Vice President, Ichikawa, who came from NEC, the founding board
28 consisted, on the Sony side, of Katsumi Ihara, previously a Representative Corporate Executive
Officer, Executive Deputy President, and Group CFO at Sony; Kiyoshi Nishitani, previously
Deputy President of Sony's Home Electronics Network Company; and Hidenosuke Kanai, Senior
Vice President of the Planning and Control Division in Sony's Home Electronics Company. All
these Sony-supplied Sony NEC Optiarc board members simultaneously continued in their careers
at Sony. Ihara is currently Chief Executive Office of Sony Financial; Nishitani as of February 2008
was head of Sony's video business, and Kanai was appointed President of Sony's Electronic
Devices Business Group in 2009.

1 216. Similarly, the NEC contingent making up the remainder of Sony NEC Optiarc's
2 founding board of directors consisted of Shunichi Suzuki, formerly a Senior Vice President and
3 member of the Board of Directors at NEC, and Masahiko Yamamoto, another former Senior Vice
4 President at NEC. After a stint at Optiarc, Suzuki retired as an Executive Vice President and
5 Member of the NEC Board in June 2007, while Yamamoto went on to become an Advisor at NEC
6 Networks and System Integration Corp., and then served as its President, the role in which he
7 currently continues (as of 2010) at this NEC subsidiary.

8 217. In short, both Sony and NEC continued to exert significant direct control over their
9 Sony NEC Optiarc venture through their complete control of its board of directors.

10 218. Like the previously described joint ventures between patent pool members and
11 outsiders, this one too had a majority ownership share controlled by the patent pool member
12 (Sony), giving it the same cost advantage in royalties. In late 2008, NEC sold off its interest in
13 Sony NEC Optiarc to Sony, the venture's name was contracted to Sony Optiarc and it became a
14 wholly owned Sony subsidiary.

15 **e. Philips and Lite-On Form Philips & Lite-On Digital Solutions (PLDS)**

16 219. In early 2006, Taiwanese ODD producer Lite-On purchased BenQ's ODD
17 production facilities in China, and took over BenQ's manufacturing ties to PBDS. BenQ exited the
18 ODD contract manufacturing business. In 2007, BenQ sold its interest in PBDS to Lite-On,
19 completely exiting the ODD business. The joint venture with Philips was renamed PLDS (with
20 Lite-On's 'L' replacing BenQ's 'B'). Philips remained the other controlling shareholder in the
21 PLDS entity. Lite-On and Philips each gained the right to appoint members of the board of
22 directors, which has the responsibility for the strategic management, direction and control of the
23 PLDS joint venture. Philips has a 51 percent ownership stake in PLDS, while Lite-On retains a 49
24 percent ownership stake.

25 **2. Significant Barriers to Entry Exist in the ODD Market**

26 220. A significant barrier preventing new firms from successfully entering or competing
27 in the ODD industry has been very large royalties charged by patent pools on optical disk
28

1 technology that were set up in the late 1990s, and the discriminatory manner in which these now-
2 prohibitive royalties are collected. Below is a brief history of patent pools in this industry.

3 **a. The Predecessor of the DVD Patent Pools**

4 221. In the 1970s and early 1980s, Philips and Sony had engaged in joint research and
5 development on optical data storage; other patents developed independently in this broad field at
6 the two companies were pooled with the patents of the joint research and development venture.
7 Their motivation for doing so is the subject of some controversy – by their own account, the
8 purpose was to enable focusing of resources on difficult technical problems without worrying
9 about their partner “free-riding” on the efforts of the joint venture through parallel patenting
10 activity. By the account of their critics, the two companies pooled all patents in the area in order to
11 reduce competition from products making use of technological alternatives they had already
12 developed independently of one another.

13 222. In 1982, one of the fruits of this Sony-Philips research and development effort
14 emerged – their joint publication of the CD-Audio standard for music optical disks. A worldwide
15 joint CD Disc Licensing Program was launched, managed by Philips.

16 223. In 1984, a second outcome of their joint research and development effort surfaced,
17 with the publication of their CD-ROM standard for read-only data storage. By 1987, this standard
18 had been adopted by international standards bodies. In the 1980s and early 1990s, Philips and Sony
19 developed yet another set of standards for CD-R (writeable once) and CD-RW (re-writeable)
20 digital data disks. These data CD formats became hugely successful, and revolutionized the way in
21 which digital data, including software programs, were stored and distributed.

22 224. Facts unearthed in litigation establish that concerns over the manner in which the
23 Philips/Sony CD patent pool operated in many respects anticipated antitrust issues that now have
24 come to light in later ODD patent pools. A lawsuit heard by the United States International Trade
25 Commission in 2004 established a number of facts about the effects of the Philips/Sony patent pool
26 on CD-R/RW disk media producers that closely parallel the manner in which the later DVD patent
27 pools operated:

1 a. That the various Philips pool royalty rates have been maintained despite the
2 fall in CD-R/RW prices to the point where those royalty rates now represent between 50 and 70
3 percent of today's average net selling price in the industry.

4 b. That although the three-percent rate determined the relevant royalty in the
5 early 1990s when CD-R prices were high enough to result in royalties in the order of 20 to 25 cents
6 per disk, prices in recent years for CD-R disks have fallen to the point where only the 10-yen
7 minimum is the relevant per-disk royalty.

8 c. The patent pool royalty rates charged by Philips and its licensor-partners for
9 CD-R/RWs are significant product price components that currently equal half of the costs of
10 manufacturing.

11 d. The two primary reasons CD-R prices have decreased are because
12 consumption has increased greatly and because manufacturing costs have been reduced. One
13 estimate is that the net selling price for CD-R disks has declined 82 percent since 1997.

14 e. The pool licensed its patents externally in a discriminatory fashion; pool
15 members and their affiliates and subcontractors paid no royalties to other patent pool members for
16 licensed products.

17 225. The subsequently formed DVD patent pools have a history of operating in a very
18 similar manner. A royalty which originally was but a small portion of the price of an ODD, has
19 since grown to be the dominant cost of producing an ODD, after scale economies and technology-
20 driven cost reductions pushed prices downward in an initially more competitive environment. This
21 prohibitive royalty now prevents potential industry entrants from exerting downward pressure on
22 the prices fixed by the conspirators, and shelters them from any external competitive challenge.
23 The members of the pool, and their affiliates and subcontractors, do not appear to be required to
24 pay royalties to the pools, by virtue of their network of cross licenses, sheltering them from any
25 competition external to the pools. It is no surprise, therefore, that as a result, patent pool members
26 and their affiliates survived an initial period of intense industrial competition, then rapidly
27 established their control over ***95 percent of global ODD sales*** in the first half of this decade.

1 **b. Description, Structure and Membership of the DVD Patent Pools**

2 226. As detailed above, two patent pools govern the use of DVD technology, a large part
3 of the ODD market. These two pools are the DVD3c and the DVD6c patent pools. A “patent pool”
4 is an agreement between two or more patent owners to license one or more of their patents to one
5 another or to third parties. These patent pools act as barriers to entry into the ODD industry
6 because while licensees must pay royalties now amounting to nearly 68 percent of the average
7 selling price of a DVD recorder, the conspirators as members of these patent pools appear to pay
8 no royalties to the pools. This gives Defendants a tremendous advantage over any possible
9 competitor. In addition, the unique structure of the patent pools also acts as a vehicle for the
10 exchange of unit and revenue information, providing a systemic opportunity for facilitation and
11 enforcement of the ODD cartel.

12 227. After the commercial success of the CD patent pool and its variants became evident
13 in the late 1990s, a great deal of interest then shifted to increasing the density of data storage in a
14 standard sized 5.25” optical disk. It might then become possible to store a reasonable amount
15 (enough to hold a movie) of high-quality digital video data on an optical disk.

16 228. In 1995, ten titans from the consumer electronics industry formed a group to study
17 and promote a standard for the development of a DVD. Among these ten were Defendants Hitachi,
18 Sony and Toshiba. Philips also participated. Each member of this group was also a holder or
19 assignee of patents that in some way involved a use or application of DVD technology.

20 229. Two competing camps of companies formed within the new standardization effort,
21 one led by Sony and Philips, the original developers of the CD standard, and the other by
22 Matsushita (Panasonic), Toshiba, and Time Warner. Under pressure from potential users in both
23 the computer industry and the entertainment industry, a DVD Forum was established to unify the
24 competing technological standards.

25 230. All parties agreed to a single standard for next-generation DVD video disks, and
26 read-only data storage, but no agreement on writeable DVD data storage was reached. Sony and
27 Philips became the nucleus of a DVD “+” camp, while Pioneer, Hitachi, Matsushita (Panasonic),
28 Toshiba, Mitsubishi, JVC, and Time Warner formed a DVD “-” camp. The result was two sets of

1 incompatible write formats for DVDs, ultimately unified only by more complex products, “super
2 multi” DVD drives capable of reading or writing all the incompatible formats, as well as CDs.

3 231. The DVD video standard included the MPEG-2 video coding system, which utilized
4 technology patented by different companies. An MPEG-2 patent pool was formed, in order to
5 license the system. Unlike many later patent pools, the MPEG-2 patent pool was “open,” with
6 parties owning patents related to the MPEG-2 standard free to join, and royalties divided among
7 the various patent owners in proportion to the number of patents contributed. Indeed, 25 companies
8 ultimately joined in this patent pool.

9 232. In theory, patent pools can have either positive or negative effects on competition
10 and consumer welfare. To the extent that a patent pool reduces the transaction costs of locating and
11 individually licensing patent rights for the dozens or even hundreds of patents owned by multiple
12 parties that would be required to produce a product, a patent pool avoids the problem of “royalty
13 stacking” (individual patent holders charging seemingly reasonable royalties that together create a
14 socially undesirable, excessively high royalty burden), and eliminates the possibility that a “hold-
15 out” owner of a required patent will attempt to charge an excessively high royalty. Thus, a patent
16 pool can be an effective instrument to cut through “patent thickets.”

17 233. On the other hand, a patent pool can also be used as a mechanism to suppress
18 competition between patented technologies, or downstream products using these patented
19 technologies, and therefore be anticompetitive and harmful to consumers. Patent pools can also
20 shelter weak patents from the challenge they would face if not part of a pool, effectively creating a
21 competition-eliminating technology cartel. And patent pools can make it more difficult for a
22 member to benefit from its independent investments in research and development, and therefore
23 reduce incentives for further innovation.

24 234. The MPEG patent pool is sometimes held up as a model of a “good” patent pool
25 design. In that regard, it is important to note the MPEG template for a patent pool is significantly
26 different from the DVD patent pools in three important dimensions. First, the MPEG licensing
27 program was “open” to all parties who believed they had patents essential to the MPEG standard.

28 Second, the MPEG licensing program had an independent, external administrator. Third, the

1 MPEG licensing program had standard, non-discriminatory licensing terms, applying to members
2 and non-members alike. The DVD patent pools, however, lacked these three features, and the
3 absence of these features created some of the opportunities for anticompetitive conduct that are
4 described in this complaint.

5 235. In December of 1998, core members of the DVD "+" camp formed a patent pool for
6 their essential DVD-ROM and video patents. This consortium became known as the DVD3c patent
7 pool. The original DVD3c patent pool was comprised of Philips Electronics/Philips IC, Sony and
8 Pioneer. The DVD3c patent pool now consists of Philips, Sony, Pioneer Corp., Hitachi, Matsushita
9 Electric Industrial Co., Ltd., Mitsubishi Electric Corp., Thomson Multimedia, Time Warner Inc.,
10 Toshiba Corp. and Victor Company of Japan Ltd. Thus, Defendants Pioneer, Philips, Sony, Hitachi
11 and Toshiba are all participants in the DVD3c patent pool.

12 236. In June of 1999, core members of the "-" camp formed their own, separate DVD-
13 ROM and video patent pool, called the DVD6c patent pool. The original DVD6c patent pool was
14 comprised of Toshiba, Hitachi, JVC, Time Warner, Matsushita and Mitsubishi. The DVD6c pool
15 now consists of Hitachi, Mitsubishi Electric Corp., Panasonic Corp., Samsung, Sanyo Electric Co.,
16 Ltd., Sharp Corp., Toshiba, Victor Company of Japan, Ltd. and Warner Bros. Home Entertainment
17 Inc. Thus, Defendants Hitachi, Samsung and Toshiba are all participants in the DVD6c pool.

18 237. The royalties charged by the DVD patent pools are now truly huge relative to the
19 total cost of manufacturing ODDs. Indeed, they account for the majority of manufacturing cost for
20 a potential entrant.

21 238. The DVD patent pool royalties now constitute a large barrier to entry by potential
22 competitors. For example, the average worldwide price for a DVD burner, on an if-sold-OEM
23 basis, was \$30 in 2007, \$25 in 2008, and \$23 in 2009. In a December 2008 presentation, Hisashi
24 Kato, of Japan's Mitsubishi Electric, estimated the royalty payable to four principal patent pools
25 holding IP related to a DVD recorder to be \$17 (of which \$14 goes to the DVD6c and DVD3c
26 pools). This is 68 percent of the average selling price of a DVD recorder in 2008, and presumably
27 an even larger share of its cost.

1 239. The alleged conspirators, who are members of these patent pools, appear to pay no
2 royalties to the pools to which their parent companies belong, or to other patent owners cross-
3 licensing their patents. This gives them an enormous – indeed, ruinous – competitive advantage
4 relative to any potential entrant. Unlike the MPEG patent pool, and like the Philips/Sony CD patent
5 pool, the DVD patent pools explicitly discriminate between members and non-members in offering
6 terms for patent licenses.

7 240. Although setting a high royalty is not *per se* illegal, it creates a huge barrier to the
8 exercise of competitive pressures on price by new entrants in downstream product markets, since
9 they can never lower prices below the floor set by the patent pool royalty, plus manufacturing cost.
10 The incumbent firms of course can make large profits at this floor, since they can obtain the lowest
11 possible manufacturing costs by subcontracting, and do not have to pay this large patent pool
12 royalty, since their parents are the owners of the pools and exempt from payment of royalties.

13 241. The only firms effectively left in the ODD industry are the firms who are members,
14 or whose parents are owners, of the DVD patent pools. This is because the large royalty charged by
15 the patent pool is a highly effective barrier keeping non-patent pool firms from entering the ODD
16 marketplace. Competition among six such pool-related companies should still be more than enough
17 pressure to drive prices down, though, closer to the much lower cost of making a DVD drive. What
18 has prevented this is the impact from the price-fixing conspiracy, which has united these firms in
19 an effort to prevent the more rapid price cuts that characteristically reflect continuing declines in
20 production costs in this dynamic high tech industry.

21 **c. The Patent Pools Facilitated Cartel Monitoring**

22 242. Another way in which the existence of the two patent pools facilitates price-fixing is
23 by making it easier to monitor production and pricing by both the six conspirator firms accounting
24 for 95 percent of industry production, and the small group of non-defendant firms producing the
25 remainder of global output. This is because the terms of both the DVD3c and DVD6c patent pools
26 require licensees to pay a royalty equal to the maximum of a fixed fee per unit produced, or a fixed
27 percent of revenues from units sold. And, because the fixed fee has been such a large portion of the
28 price of a unit in recent years, the royalty has effectively been a fixed per unit payment. Thus, *all*

1 *producers outside of the patent pools must report production statistics to the pool.* A price-fixing
2 conspiracy with access to the details of the royalty payments can easily determine whether
3 production by non-conspirators is causing unexpected shifts in industry output and prices, or
4 whether one of the six conspirators who are also members of the patent pool must be cheating on
5 cartel agreements on pricing or output.

6 243. The model license agreement of the DVD3c pool requires licensees to report, on a
7 quarterly basis, the quantities of DVD products on which royalties are due, including specifying the
8 identities of the buyers; the trademarks used in connection with the DVD players; the net selling
9 price of the DVD players; and the quantities of DVD players sold.

10 244. The model license agreement of the DVD6c pool requires licensees to report, on a
11 semi-annual basis, the quantities of DVD products on which royalties are due, the trademarks or
12 trade names used for such products, and a computation of the royalties due on the agreement.

13 245. A unique feature of the DVD3c and DVD6c patent pools, which differentiates it
14 from other patent pools, is that they are administered by conspirator parents with majority
15 ownership of their joint ventures. The DVD3c pool is administered by Philips, while the DVD6c
16 pool is administered by Toshiba in Japan, Europe and Africa; Hitachi in Asia, Oceania and the
17 Middle East; and Panasonic in the Americas. Thus, the existence of the patent pools ensures that
18 sensitive competitive information such as sales volume and selling prices is received by
19 participants in the conspiracy, and not by an independent administrative entity. And circulation of
20 information from patent pool participant parent to their joint venture, or wholly owned ODD
21 business unit, and between conspirators is not difficult. Indeed, it is actually facilitated by the terms
22 of the licensing agreements. Parents and subsidiaries have numerous opportunities to meet with one
23 another while participating in patent pool administrative oversight and technical discussions, or in
24 management meetings for the joint venture subsidiaries.

25 246. More egregiously, the model license agreement of the DVD6c specifically
26 contemplates sharing sensitive business information amongst members of the patent pool:

27 Licensee agrees that members of the DVD Patent Licensing Group
28 may have access to the information contained in such reports
regarding the names of licensees, categories and model numbers of

the licensed products, total quantities of sales of such products and total royalties due under this Agreement.

247. Both patent pools apparently also have “compliance” programs that require licensees to identify their suppliers and customers to the licensing administrator.

248. The only available empirical study suggests that direct involvement by patent owners in administering a patent pool is quite rare. Of eighteen current patent pools examined, all *except* the two DVD patent pools had an independent or third party specialist pool administrator.⁵⁰ This presumably is because the patent owners in most other pools recognized the temptations (and legal antitrust dangers) of having industry participants collect detailed information on sales and unit shipments – and therefore pricing – of various licensed products by their licensees and competitors.

249. To successfully enforce a price-fixing conspiracy, co-conspirators try to identify whether an unexpected change in price is the result of a co-conspirator cheating on cartel agreements, or the result of increased production or other events outside the control of the conspiracy. By granting pool members direct access to information on production and pricing by licensees external to the pool, the license administration arrangements in both DVD pools allow pool members to monitor external ODD sales and pricing, and therefore facilitate a more effective price-fixing conspiracy.

3. Defendants’ Participation in Trade and Business Organizations Provided Opportunities for Collusion

250. During the Class Period, Defendants belonged to trade and business organizations that focused on ODDs and related industries, such as the Optical Storage Technology Association, the DVD Forum, the International Symposium of Optical Memory and the Blu-Ray Disc Association. During the Class Period, these organizations held multiple meetings and conferences attended by Defendants and their employees, which provided Defendants with the opportunity to meet, discuss, and agree upon their pricing of ODDs.

⁵⁰ Although the DVD6c pool originally proposed to have a licensing agency administer its licensing program, it instead opted to have pool members divide up these duties among themselves along regional lines.

1 **a. The Optical Storage Technology Association**

2 251. The Optical Storage Technology Association is an international trade association
3 incorporated in 1992 to promote the use of recordable optical technologies and products. The
4 organization's membership includes "optical product manufacturers and resellers from three
5 continents, representing more than 85 percent of worldwide writable optical product shipments."
6 The Optical Storage Technology Association states that its members "work to shape the future of
7 the industry through regular meetings."

8 252. From 2005 to 2008, the Optical Storage Technology Association's membership list
9 included Defendants Pioneer Electronics (USA) Inc., Sony Corporation, Toshiba, LG Electronics,
10 Lite-On IT Corporation, Philips Electronics, Samsung Electronics Co., Ltd., Samsung Techwin and
11 NEC Technologies Inc., or related subsidiaries of the Defendants. On information and belief, the
12 Optical Storage Technology Association met on multiple occasions each year from 2005 to 2008.

13 **b. The DVD Forum**

14 253. The DVD Forum is an organization responsible for the licensing and distribution of
15 DVD products whose "purpose is to exchange and disseminate ideas and information about the
16 DVD Format and its technical capabilities, improvements and innovations." Defendants Pioneer,
17 Hitachi, LG Electronics, Philips, Samsung, Sony, NEC and Toshiba are, or have been during the
18 relevant time period, members of its steering committee. That is, each of the corporate family of
19 Defendants involved in the cartel had a representative on the DVD Forum Steering Committee. In
20 addition, Defendant Lite-On is a member of the organization. On information and belief, from
21 2005 to 2010, members of the DVD Forum met on multiple occasions each year.

22 254. At the May 26, 2005 meeting in France, a representative from Sony was not in
23 attendance, although Sony is a Steering Committee member. Toshiba took issue with Sony's
24 absence and proposed an amendment to the Forum charter that required those committee members
25 not making a "reasonable effort to advance the purposes of the Forum" essentially be required to
26 withdraw as a Steering Committee member. A reasonable inference from Toshiba's reaction to
27 Sony's absence at the Steering Committee meeting was that the presence of all parties in the ODD
28 cartel at these trade meeting was necessary for an exchange of information and to police the

1 activities of the cartel. In fact, after Toshiba's admonition, Sony did not miss another Steering
2 Committee meeting in the following five years.

3 **c. The International Symposium of Optical Memory**

4 255. The International Symposium of Optical Memory is an organization "concerned
5 with the materials, the physics, and the technology of optical memories and provides an
6 opportunity to share the latest information in these fields with the international research
7 community."

8 256. From 2005 to 2008, the Optical Storage Technology Association's membership list
9 included Defendants Pioneer Corp., Hitachi, Hitachi Ltd., LG, LG Electronics Inc., NEC Corp.,
10 Philips, Samsung Electronics Co. Ltd., and Sony Corp. On information and belief, the International
11 Symposium of Optical Memory met on multiple occasions each year from 2005 to 2009.

12 **d. The Blu-Ray Disc Association**

13 257. The Blu-Ray Disc Association is an industry consortium that develops and licenses
14 Blu-Ray Disc technology and is responsible for establishing format standards and promoting
15 business opportunities for Blu-Ray Disc. The Blu-Ray Disc Association is divided into three levels
16 of membership: the Board of Directors, Contributors, and General Members.

17 258. The "Blu-ray Disc founder group" was started on May 20, 2002 by the
18 Massachusetts Institute of Technology and nine leading electronic companies, including
19 Defendants Sony, Philips, LG Electronics, Hitachi and Samsung. In order to enable more
20 companies to participate, it announced in May 2004 that it would form the Blu-Ray Disc
21 Association, which was inaugurated on October 4, 2004.

22 259. The Board of Directors of the Blu-Ray Disc Association currently includes
23 Defendants Pioneer Corp., Hitachi, LG Electronics, Philips Consumer Electronics (a division of
24 Defendant Philips), Samsung and Sony. Contributors to the Blu-Ray Disc Association currently
25 include Defendants Lite-On and Toshiba.

26 **E. Governmental Investigations into Price Fixing in the ODD Industry**

27 260. Defendants are currently under investigation by multiple governmental
28 organizations, including the United States Department of Justice ("DOJ") for anticompetitive

1 conduct in connection with the ODD industry. The United States' criminal investigation of the
 2 ODD conspiracy is being conducted by the DOJ's Antitrust Division in the Northern District of
 3 California.

4 **1. Defendants Have Admitted that Multiple Governmental Organizations Are**
 5 **Investigating Price Fixing in the ODD Industry**

6 261. On October 23, 2009, Sony disclosed its subsidiary's receipt of a subpoena from the
 7 DOJ in its Form 6-K, filed with the Securities and Exchange Commission ("SEC"):

8 Sony Corporation said today that its U.S. subsidiary, Sony Optiarc
 9 America Inc., has received a subpoena from the U.S. Department of
 10 Justice (DOJ) Antitrust Division seeking information about its optical
 11 disk drive business. Sony understands that the DOJ and agencies
 outside the United States are investigating competition in optical disk
 drives. Sony intends to cooperate fully with the DOJ and other
 agencies in this inquiry.

12 262. In its Form 6-K, filed with the SEC on November 16, 2009, Hitachi admitted that its
 13 subsidiary received a subpoena from the DOJ in June 2009 regarding price-fixing violations related
 14 to ODDs. In its Form 20-F, filed with the SEC on June 29, 2010, Hitachi acknowledged it has also
 15 received requests for information from the European Union and Singapore regulators for alleged
 16 antitrust violations relating to ODDs:

17 In June 2009, our subsidiary, Hitachi-LG Data Storage, received a
 18 grand jury subpoena in connection with an investigation conducted
 by the Antitrust Division of the U.S. Department of Justice and
 received requests for information from the European Commission,
 both in respect of alleged antitrust violations relating to optical disk
 drives. Also in June 2009, the Competition Commission of Singapore
 began an investigation of our subsidiary, Hitachi-LG Data Storage
 Korea, also in respect of alleged antitrust violations relating to
 optical disk drives.

21 263. In its Form 20-F, filed with the SEC on February 22, 2010, Philips released its 2009
 22 Annual Report and revealed for the first time that it and its subsidiary, PLDS, are also the subject
 23 of the same international investigations:

24 On October 27, 2009, the Antitrust Division of the United States
 25 Department of Justice confirmed that it had initiated an investigation
 into possible anticompetitive practices in the Optical Disc Drive
 26 (ODD) industry. Philips Lite-On Digital Solutions Corp. (PLDS), a
 joint venture owned by the Company and Lite-On IT Corporation, as
 27 an ODD market participant, is included in this investigation. PLDS is
 also subject to similar investigations outside the US relating to the
 28

1 ODD market. PLDS and Philips intend to cooperate with the
2 authorities in these investigations.

3 * * *

4 These matters are in their initial stages and due to the considerable
5 uncertainty associated with these matters, on the basis of current
6 knowledge, the Company has concluded that potential losses cannot
7 be reliably estimated with respect to these matters. An adverse final
8 resolution of these investigations and litigation could have a
9 materially adverse effect on the Company's consolidated financial
10 position, results of operations and cash flows.

11 264. On October 27, 2009, Defendant Toshiba also acknowledged that its ODD operation
12 –TSST, its joint venture with Samsung – had received a subpoena from the DOJ in connection with
13 its investigation into the ODD industry and that its ODD unit was also answering queries from
14 authorities in other regions.

15 265. It is significant that Defendants' anticompetitive behavior has been the subject of a
16 criminal grand jury investigation by the DOJ. In order for the DOJ to institute a grand jury
17 investigation, a DOJ Antitrust Division attorney must believe that a crime has been committed and
18 prepare a detailed memorandum to that effect.⁵¹ Following a review of the memorandum, the
19 request for a grand jury must be approved by the Assistant Attorney General for the Antitrust
20 Division, based on the standard that a criminal violation may have occurred. In addition, the fact
21 that the DOJ Antitrust Division investigation is criminal, as opposed to civil, is significant as well.
22 The Antitrust Division's "Standards for Determining Whether to Proceed by Civil or Criminal
23 Investigation" state: "[i]n general, current Division policy is to proceed by criminal investigation
24 and prosecution in cases involving horizontal, per se unlawful agreements such as price fixing, bid
25 rigging and horizontal customer and territorial allocations."⁵² Accordingly, the existence of a
26 criminal investigation into the ODD industry supports the existence of the conspiracy alleged
27 herein.

28 ⁵¹ See Antitrust Grand Jury Practice Manual, Vol. 1, Ch. I.B.1 (1991) ("[i]f a Division attorney believes that a criminal violation of the antitrust laws has occurred, he should prepare a memorandum requesting authority to conduct a grand jury investigation.") (available at <http://www.justice.gov/atr/public/guidelines/206542.htm>).

⁵² See Antitrust Division Manual, Chapter III.C.5, III-20 (2009), (available at <http://www.justice.gov/atr/public/divisionmanual/chapter3.pdf>).

2. **The Department of Justice Has Admitted It Has Convened a Criminal Grand Jury to Investigate Defendants' Price Fixing in the ODD Market**

266. The DOJ has confirmed that a grand jury is investigating criminal antitrust violations in the ODD industry: "The DOJ is currently assisting a grand jury investigating possible criminal antitrust violations in the optical disk drive ('ODD') industry."⁵³ The DOJ has further confirmed that: "The grand jury has issued subpoenas and is in the critical evidence gathering phase of its investigation."⁵⁴

267. In light of this grand jury investigation, the DOJ requested that this Court stay discovery in these civil proceedings. In requesting this stay, the DOJ emphasized that although it has conducted many investigations into alleged criminal antitrust violations, it has rarely requested that a civil court stay discovery pending resolution of the criminal investigation. In fact, the government has only sought a stay in four matters. And of these four matters, it has declined to bring significant charges in only one instance:

In the past decade, the Antitrust Division has conducted numerous investigations into alleged criminal antitrust violations in the Northern District of California. In only four of these matters has the government sought limited states to prevent civil litigation from impeding grand jury investigations[.] In each of these cases, the court has entered an order granting a stay. These matters are: dynamic random access memory ("DRAM"), static random access memory ("SRAM"), liquid crystal display ("TFT-LCD"), and cathode ray tube ("CRT"). In only one of these matters did the government decline to bring significant charges. The ODD investigation contains facts, issues, and concerns similar to these other investigations.⁵⁵

268. Moreover, accompanying their motion to stay discovery in this case, the DOJ submitted a confidential declaration of Sidney A. Majalya detailing the criminal investigation into

⁵³ See Memorandum of Points and Authorities in Support of the United States' Motion for a Limited Stay of Discovery at 3 (filed May 20, 2010, Ct. Rec. 68) ("DOJ Mot. to Stay"). Page references to the DOJ Mot. to Stay are to the PACER/ECF numbers found at the top right-hand corner of the page.

⁵⁴ See Declaration of Sue Ann Slates in Support of Defendant United States Department of Justice, Antitrust Division's Motion for Summary Judgment, ¶ 10, *Lieff, Cabraser, Heimann & Bernstein, LLP v. U.S. Department of Justice Antitrust Division*, Case No. 3:10-cv-00013-VRW (filed Apr. 29, 2010, Ct. Rec. 15) ("Slates Decl."). Ms. Slates is the Chief of the Freedom of Information Act/Privacy Act Unit of the Antitrust Division of the DOJ in Washington, D.C. *Id.*, ¶ 1.

⁵⁵ See DOJ Mot. to Stay at 3-4.

1 price fixing in the ODD industry, and arguing that this confidential submission “presents
2 circumstances” that warrant a stay of discovery in this case.⁵⁶

3 269. The DOJ has stated that it proceeds with a criminal proceeding in cases involving
4 *per se* unlawful agreements, such as price-fixing, bid-rigging and horizontal market allocations:

5 It is the Division’s policy ‘to proceed by criminal investigation and
6 prosecution in cases involving horizontal, *per se* unlawful
7 agreements such as price-fixing, bid-rigging and horizontal customer
8 and territorial allocations.’ [footnote omitted] *Per se* violations of
9 price-fixing, bid-rigging, and market allocations are generally
10 prosecuted criminally, because they have been found to be
11 unambiguously harmful, that is, *per se* illegal. Such cartel
12 agreements have been shown to defraud customers and
13 unquestionably raise prices or restrict output without creating any
14 plausible offsetting benefit to consumers, unlike other business
15 conduct that may be the subject of civil lawsuits by the Division. If
16 proved, such activities violation Section 1 of the Sherman Act, 15
17 U.S.C. § 1.⁵⁷

18 270. Given these statements by the DOJ, the most reasonable inference is that the
19 government is in possession of evidence confirming that criminal antitrust violations have been
20 committed in the ODD market, or believes that such evidence is likely to be discovered in the next
21 year. The government’s statements regarding the serious and unique nature of the grand jury
22 investigation into the ODD industry and the Defendants support the existence of the conspiracy
23 alleged in this complaint.

18 **3. Defendants’ Agent Admits that the “Implied Promise” of the Grand Jury**
19 **Investigation Is Criminal Indictments or Admissions of Guilt**

20 271. Defendants’ counsel has also confirmed that indictments or plea agreements are
21 more likely than not in the DOJ’s criminal grand jury investigation. At a prior hearing before this
22 Court, Defendants’ agent, Daniel Wall, counsel for Toshiba and TSST, when arguing for all
23 Defendants that a stay of discovery would not be harmful to Plaintiffs’ rights stated:

24 But the – but what we’re talking about now is if there is a 12-month
25 period of time when there isn’t merits discovery into the nature of the
26 cartel, why is that going to be beneficial? *It’s because something’s*
going to happen in the next 12 months. The implied, you know,
promise here is that within the next 12 months there’s going to be

27 ⁵⁶ See DOJ Mot. at Stay at 5.

28 ⁵⁷ See Slates Decl., ¶ 6.

1 *an indictment, there's going to be a plea agreement*, there's going
 2 to be something that an actually starts to reveal what it is that the
 3 government thinks is going on here.

4 272. That is, defense counsel believes that the "implied promise" of the grand jury
 5 investigation is that significant criminal activities will be (or have been) uncovered and that
 6 indictments or plea agreements will be forthcoming within the next twelve months. These
 7 statements regarding the near certainty of indictments or admissions of criminal guilt further
 8 support the existence of the conspiracy alleged in this complaint.

9 273. This statement is admissible as a party admission under Federal Rule of Evidence
 10 801(d)(2)(C) as a statement made by a person authorized by the party to make a statement
 11 concerning the subject and Rule 801(d)(2)(D) as a statement by the party's agent or servant
 12 concerning a matter within the scope of the agency or employment, made during the existence of
 13 the relationship.

14 **F. Defendants Have a History of Colluding to Fix Prices in Related Markets**

15 274. Many of the Defendants have a long history of criminal collusion and are either
 16 currently involved in worldwide investigations into other technology-related products, or have been
 17 convicted of participating in price-fixing cartels involving technology-related products. Evidence
 18 of Defendants' other price-fixing crimes are admissible pursuant to Federal Rule of Evidence
 19 404(b), because the Defendants' past criminal acts tend to show a specific pattern of price-fixing
 20 behavior and planning between defendants repeated throughout very similar technology industries,
 21 among repeat players in these industries.

22 275. The following chart summarizes the involvement of Defendants and their related
 23 entities in the various price-fixing conspiracies:

INDUSTRY	GOVERNMENT INVOLVED	DEFENDANTS IMPLICATED
LCD	Korea, Japan, United States	LG Electronics Inc. (joint venture), Koninklijke Philips Electronics N.V. (joint venture), Samsung Electronics Company, Ltd, Hitachi, Ltd. (subsidiary), Toshiba Corp.
DRAM	United States, European Commission	Samsung Electronics Company, Ltd, NEC Corp., Hitachi Ltd., Toshiba Corp.

INDUSTRY	GOVERNMENT INVOLVED	DEFENDANTS IMPLICATED
CRT	Korea, Japan, United States, European Commission	Samsung (subsidiary), LG Electronics Inc. (joint venture), Koninklijke Philips Electronics N.V. (joint venture)

1. Defendants Have Been Charged With and Have Pleaded Guilty to Participating in Price-Fixing Meetings in the United States and for Fixing the Price of LCD Panels and LCD Products Sold in the United States

276. A number of the ODD Defendants have been implicated in a worldwide price-fixing conspiracy for thin film transistor liquid crystal displays ("TFT-LCD").

277. In December 2006, authorities in Japan, South Korea, the European Union, and the United States revealed the existence of a comprehensive investigation into anti-competitive activity among LCD Panel manufacturers. In a December 11, 2006, filing with the SEC, LG Display Co. Ltd. ("LG Display") disclosed for the first time that officials from the Korea Fair Trade Commission and Japan Fair Trade Commission visited the company's Seoul and Tokyo offices and that the DOJ had issued a subpoena to its San Jose office. During the time period relevant to the LCD price-fixing conspiracy, LG Display was a joint venture between Defendants LG Electronics and Philips, with LG Electronics owning 37.9 percent and Philips owning 19.9 percent as of December 31, 2007.

278. On December 12, 2006, news reports indicated that in addition to LG Display, Samsung was also under investigation.

279. In November 2008, LG Display admitted and plead guilty to participating in the conspiracy from September 2001 through June 2006 to fix the price of LCD Panels sold worldwide, and to participating in meetings, conversations and communications in Taiwan, South Korea and the United States to discuss the prices of LCD Panels, agreeing to fix the prices of LCD Panels, and exchanging pricing and sales information for the purpose of monitoring and enforcing adherence to the agreed-upon prices. In connection with its guilty plea, LG Display has agreed to pay a fine of \$400 million, reported at the time as the second-highest criminal fine ever imposed by the DOJ's Antitrust Division, for its participation in the conspiracy.

1 280. In addition, two LG Display executives have thus far pled guilty based on their
2 respective roles in the global cartel. Each has been fined and has received prison sentences ranging
3 from seven to twelve months:

- 4 • Chung Suk "C.S." Chung, an executive from LG Display. In connection
5 with his guilty plea, Mr. Chung has agreed to serve a 7-month prison term
6 and pay a criminal fine of \$25,000.
- 7 • Bock Kwon, an executive from LG Display. In connection with his guilty
8 plea, Mr. Kwon has agreed to serve a 12-month prison term and pay a
9 criminal fine of \$30,000.

10 281. In addition, Duk Mo Koo, former Executive Vice President and Chief Sales Officer
11 from LG Display, has been indicted for participating in the conspiracy to fix the price of LCD
12 Panels sold worldwide from December 2001 through December 2005.

13 282. As acknowledged in its Form 20-F, filed with the SEC on June 29, 2010, a
14 subsidiary of Defendant Hitachi also plead guilty to price fixing in the LCD industry and paid a
15 fine of \$31 million to the DOJ in March 2009:

16 Also in December 2006, Hitachi Displays, our subsidiary which was
17 demerged and succeeded to our LCD operations, received a grand
18 jury subpoena in connection with the investigation conducted by the
19 Antitrust Division of the U.S. Department of Justice in respect of
20 alleged antitrust violations relating to LCDs. In March 2009, Hitachi
21 Displays pled guilty to one count of price fixing under the Sherman
22 Act, for which it paid a fine of \$31 million in June 2009.

23 283. Although it has not been publicly acknowledged, it is widely believed that Samsung
24 is in the DOJ leniency program with respect to the DOJ's investigation into the market for TFT-
25 LCD, meaning that it has admitted its participation in the cartel. The TFT-LCD investigation is
26 ongoing, and Toshiba as well as other entities remain under investigation. Such criminal
27 investigation is being conducted by the San Francisco office of the DOJ's Antitrust Division.

28 **2. Defendants Have Admitted to Participating in Price-Fixing Meetings in the
United States and for Fixing the Price of Dynamic Random Access Memory
Sold in the United States**

29 284. Further, in 2005, Defendant Samsung agreed to plead guilty to participating in a
30 price-fixing conspiracy involving dynamic random access memory ("DRAM") in the United
31 States. DRAM is a common model for "dynamic" semiconductor memories for personal computers
32 (PCs), servers and workstations. As part of its guilty plea, Samsung agreed to pay a fine of \$300

1 million. It is believed that during the DRAM conspiracy, at least 48 Samsung officers and
 2 employees, including senior executives with final pricing authority, had price-related contacts with
 3 employees of Toshiba, NEC and Hitachi.

4 285. A total of six Samsung executives have thus far pled guilty based on their respective
 5 roles in the global cartel. Each has been fined \$250,000, and the executives received prison
 6 sentences ranging from seven to fourteen months. Among the Samsung individuals charged were
 7 the vice presidents for marketing and sales for Samsung's memory division and the vice president
 8 for marketing of memory products at Samsung Semiconductor (a United States subsidiary of
 9 Samsung):

- 10 • Il Ung Kim – (Samsung Electronics – vice president of marketing for
 11 memory division) \$250,000 fine and 14 month prison sentence.
- 12 • Sun Woo Lee (Samsung Electronics – senior manager DRAM sales)
 13 \$250,000 fine and 8 month prison sentence.
- 14 • Yeongho Kang (Samsung Semiconductor – associate director of DRAM -
 15 marketing) \$250,000 fine and 7 month prison sentence.
- 16 • Young Woo Lee (Samsung subsidiary in Germany – sales director)
 17 \$250,000 fine and 7 month prison sentence.
- 18 • Thomas Quinn (Samsung Semiconductor – vice president of marketing for
 19 memory products) \$250,000 fine and 8 month prison sentence.
- 20 • Young Hwan Park (formerly VP of sales at Samsung Electronics; currently
 21 president of Samsung Semiconductor) \$250,000 fine and 10 month prison
 22 sentence.
- 23 • Young Bae Rha (Samsung Electronics – vice president of sales and
 24 marketing for memory division); Charged in October 2006 indictment and
 25 remains at large.

26 **3. Defendants Have Admitted to Participating in Price-Fixing Meetings in the**
 27 **United States and for Fixing the Price of Dynamic Random Access Memory**
 28 **Sold in the European Union**

29 286. In May 2010, a number of Defendants admitted to participating in a cartel to fix the
 30 price of DRAM sold in the European Union and agreed to pay, collectively, 331 million Euros in
 31 fines.

32 287. As the European Commission found, the overall cartel was in operation between
 33 July 1, 1998 and June 15, 2002. It involved a network of contacts and sharing of secret

1 information, mostly on a bilateral basis, through which they coordinated the price levels and
2 quotations for DRAM, sold to major PC or server OEMs in the European Economic Area.

3 288. Several of the Defendants admitted to the participation in the DRAM price-fixing
4 cartel. Between December 2003 and February 2006, Defendants Samsung and NEC applied for
5 leniency under the European Union's Leniency Notice. Companies that are first to reveal cartels to
6 the Commission enjoy immunity from fines under the Commission's 2002 Leniency Notice.
7 Companies that cooperate in the investigation can receive significant reductions. Companies which
8 do not qualify for immunity may benefit from a reduction of fines if they provide evidence that
9 represents "significant added value" to that already in the Commission's possession and have
10 terminated their participation in the cartel. Evidence is considered to be of a "significant added
11 value" for the Commission when it reinforces its ability to prove the infringement of Europe's
12 antitrust laws.

13 289. Both Samsung and NEC cooperated with the European Commission, supplying
14 information that provided significant added value in enabling the European Commission to prove
15 cartel infringement. The European Commission took account of their cooperation in the
16 investigation and granted a reduction of respectively 18 percent in the fine to both Samsung and
17 NEC. In total, Samsung was fined over 145 million Euros and NEC was jointly and severally liable
18 (along with its joint venture partners) for fines of approximately 21 million Euros.

19 290. Hitachi and Toshiba each settled with the European Commission and agreed to pay
20 significant fines. Hitachi was jointly and severally liable (along with its joint venture partners) for
21 fines of over 31 million Euros, and the European Commission fined Toshiba over 17 million Euros.

22 **4. Governmental Investigations Have Revealed Defendants' Involvement in a**
23 **Price-Fixing Conspiracy of Cathode Ray Tubes**

24 291. In addition, on October 7, 2009 in a cease and desist order, The Japan Fair Trade
25 Commission levied \$37.4 million in fines against five companies, including a joint venture of
26 Defendants LG Electronics Inc. and Koninklijke Philips Electronics N.V., LG Philips Displays
27 Korea Co., and an arm of South Korea's Samsung group and their affiliates for alleged
28 participation in a price-fixing cartel for cathode ray tubes for televisions. Included amongst the

1 findings of the Japan Fair Trade Commission were that employees of LG Philips Display Korea
2 and Samsung, beginning around May 2003, formed an agreement to continuously hold meetings
3 about once every other month where they jointly set minimum target prices on a quarterly basis.

4 292. In November 2009, the European Commission confirmed it had sent Statements of
5 Objections to “a number of companies active in the [CRT] industry.” Although the European
6 Commission did not disclose who received the Statements of Objections, news reports confirmed
7 that Philips was among those targeted.

8 293. In the United States, two former executives of Chunghwa, Cheng Yuan Lin and
9 Wen Jun Cheng (indicted separately in the TFT-LCD investigation), were indicted on charges by
10 the Department of Justice on charges related to the CRT investigation. More charges are
11 anticipated in the United States.

12 IV. TRADE AND COMMERCE

13 294. During the Class Period, Defendants collectively controlled the vast majority of the
14 market for ODDs, both globally and in the United States.

15 295. Defendants’ unlawful activities, as described herein, took place within the flow of
16 interstate commerce to purchasers of ODD Products located in states other than the states in which
17 Defendants are located, as well as throughout the world, and had a direct, substantial and
18 reasonably foreseeable effect upon interstate and international commerce, including the United
19 States’ market for ODD Products.

20 296. A number of facts demonstrate that Defendants’ price-fixing conspiracy had a
21 direct, substantial and reasonably foreseeable effect on domestic commerce. As alleged in this
22 complaint, one of the precipitating factors to the beginning of the conspiracy was the introduction
23 of electronic auctions by Dell and HP for the procurement of ODDs, among other products. In
24 response, Defendants began their illegal price-fixing activities.

25 297. The procurement events held by Dell and HP occurred in the United States. For
26 large parts of the Class Period, HP’s ODD purchasing occurred in Palo Alto, California and
27 Houston, Texas. For Dell, ODD purchasing took place in Austin, Texas during most of the Class
28

1 Period. As alleged above, these procurement events resulted in inflated prices due to Defendants'
2 price and market allocation conspiracy.

3 298. Although Defendants' price-fixing conspiracy reaches beyond merely Dell and HP,
4 price-fixing the auctions of these two OEMs alone had a direct, substantial and reasonably
5 foreseeable effect on United States commerce. These two OEMs account for approximately 50
6 percent of the United States market for personal computers, accounting for roughly 10 million units
7 shipped within the United States per year.

8 299. Products containing ODDs such as computers and Xbox game consoles are now
9 ubiquitous across the United States. A report commissioned by hard drive manufacturer Seagate
10 has found that seventy-six percent of Americans own a personal computer and thirty-eight percent
11 own a videogame console.

12 300. According to the U.S. Census Bureau's Current Population Survey in October 2009,
13 over 73 percent of the population had access to the Internet from their household (which would
14 itself require access to a computer or other electronic device). The following chart provides the
15 number of households and percentage of population by state:

State	Individual lives in household with Internet Access	
	Number (in thousands)	Percent
United States	212,719	73.5
Alabama	2,742	61.7
Alaska	526	83.4
Arizona	4,638	74.3
Arkansas	1,729	63.4
California	26,388	75.6
Colorado	3,599	76.1
Connecticut	2,726	82.0
Delaware	638	76.5
District of Columbia	411	73.3
Florida	13,092	75.0
Georgia	6,737	73.0

State	Individual lives in household with Internet Access	
	Number (in thousands)	Percent
Hawaii	959	78.9
Idaho	1,139	77.5
Illinois	9,083	74.2
Indiana	4,230	69.5
Iowa	2,088	73.2
Kansas	1,994	75.8
Kentucky	2,658	65.5
Louisiana	2,724	65.8
Maine	978	77.7
Maryland	4,201	78.7
Massachusetts	5,095	81.7
Michigan	7,005	73.8
Minnesota	3,875	77.8
Mississippi	1,569	56.6
Missouri	3,884	69.5
Montana	643	69.6
Nebraska	1,291	77.0
Nevada	1,895	76.0
New Hampshire	1,069	84.7
New Jersey	6,853	83.0
New Mexico	1,224	65.0
New York	14,269	76.9
North Carolina	6,038	69.1
North Dakota	440	73.2
Ohio	7,936	72.6
Oklahoma	2,244	65.2
Oregon	2,951	80.6
Pennsylvania	8,787	74.3
Rhode Island	764	77.0
South Carolina	2,737	63.4
South Dakota	531	70.0
Tennessee	4,113	69.1
Texas	15,231	65.5
Utah	2,186	83.1
Virginia	5,492	75.4
Vermont	455	76.4

State	Individual lives in household with Internet Access	
	Number (in thousands)	Percent
Washington	5,119	81.7
West Virginia	1,150	66.9
Wisconsin	4,207	78.8
Wyoming	387	76.1

V. FRAUDULENT CONCEALMENT

301. Throughout the relevant period, Defendants affirmatively and fraudulently concealed their unlawful conduct against the Indirect Purchaser Plaintiffs and the classes.

302. Indirect Purchaser Plaintiffs did not discover and could not have discovered, through the exercise of reasonable diligence, the existence of the conspiracy alleged herein until October 26, 2009 when it was first publicly reported that manufacturers of ODDs were under investigation by the antitrust authorities in the United States and elsewhere in the world for conspiring to fix prices of ODDs. This is because Defendants and their co-conspirators actively and fraudulently concealed the existence of their contract, combination or conspiracy. Because Defendants' agreement, understanding and conspiracy were kept secret, Indirect Purchaser Plaintiffs were unaware of Defendants' unlawful conduct alleged herein and did not know that they were paying artificially high prices for ODD Products.

303. Pioneer's role in the conspiracy alleged herein was not discovered, and could not have been discovered, until June 3, 2011 (or a reasonable time thereafter), when the grand jury documents were first produced to the plaintiffs in this litigation. Prior to June 3, 2011, Pioneer's role as a conspirator was not publicly disclosed – the Pioneer entities did not acknowledge receiving a subpoena from the United States Department of Justice, nor did they publicly acknowledge any involvement in any criminal investigation relating to ODDs. Evidence of Pioneer's involvement in the conspiracy crystalized only after plaintiffs' review of grand jury documents on June 3, 2011, and recent deposition testimony.

1 304. Publicly, Pioneer stated that it maintained antitrust policies, which prohibited the
2 type of collusion seen in this litigation. For example, in Pioneer's 2004 "Pioneer Group Code of
3 Conduct," the company publicly stated that it maintained Fair Business Conducts [sic]:

4 We maintain fair and transparent relationships with our business
5 partners, engaging in fair transaction practices in accordance with
applicable laws and regulations, such as an antitrust law.

6 We do not take part in collusion, cartels, or similar activities with
7 other companies within our industry that would unlawfully impede
free competition, or any other activities that may give rise to such
8 concerns.

9 305. Defendants engaged in a successful, illegal price-fixing conspiracy with respect to
10 ODDs, which they affirmatively concealed, at least in the following respects:

11 a. By agreeing amongst themselves not to discuss publicly, or otherwise reveal,
12 the nature and substance of the acts and communications in furtherance of their illegal scheme.

13 b. By agreeing amongst themselves to limit the number of representatives from
14 each Defendant who were aware of the conspiracy, so as to avoid detection.

15 c. By agreeing to limit the number of written communications regarding the
16 conspiracy, accomplished by oral communications via telephone or meeting face-to-face.

17 d. By agreeing to meet at locations where the conspiracy was less likely to be
18 detected – such as in the lobby of a competitor's building rather than in the offices themselves.

19 306. As a further example, on at least one occasion, one of the co-conspirators had a
20 face-to-face meeting with another co-conspirator at a location that he or she believed was far
21 enough away from a customer's offices that they would not be seen.

22 307. During the Class Period, Defendants falsely stated to the public and industry sources
23 that ODD manufacturers faced intense pricing in the ODD market:

24 a. For example, at an October 26, 2004 an investors' conference, Danny Liao,
25 president of Lite-On stated that although it expected its fourth-quarter revenues to grow 10-12
26 percent sequentially due to seasonal effects, the company estimates its average gross margins to
27 decrease 17-19 percent on falling OEM prices. Liao indicated that increasing competition for OEM
28

1 orders has pushed down quotations for 16x DVD burners to as low as \$60. And he predicted that
2 some second-tier ODD makers in Taiwan will withdraw from the market in 2005.

3 b. On November 30, 2004, Taiwanese makers of ODDs reported that OEM
4 quotations for 16x DVD burners, which had been remaining stable at \$60-65 for a few months fell
5 to \$55-58 due to increasing competition to meet orders from Dell, HP and other international PC
6 brands. The makers indicated that HLDS, TSST, Lite-On, BenQ and Pioneer were the main
7 competitors for 16x DVD burner OEM orders and that recently some makers had been cutting
8 prices in an attempt to receive more orders.

9 c. On December 27, 2004, industry publications noted that "Competition in the
10 Taiwan optical-disc drive (ODD) market is heating up, with HLDS (Hitachi-LG Data Storage),
11 TSST (Toshiba-Samsung Storage Technology), NEC and Philips planning to offer additional ODD
12 lines next year. Market competition is expected to become more intense than in 2004, according to
13 Taiwan-based ODD makers."

14 d. On July 7, 2005, Taiwan-based makers of ODDs informed industry press
15 that OEM quotations for 16x DVD burners dropped to \$40 due to intense competition for orders
16 from leading vendors such as Pioneer, NEC, Lite-On, BenQ, HLDS and TSST. The price
17 represented a drop of 12-20 percent and the same sources suggested that future cuts were expected
18 to be much smaller, as the vendors' gross margins had already declined to low levels.

19 e. On December 16, 2005, Lite-On stated that OEM prices for 16x DVD
20 burners had fallen as low as \$35 and further reductions in price would depend on royalty changes.
21 Other ODD makers in Taiwan stated to the same trade publication that intensive price competition
22 is likely to push down OEM prices of 16x DVD Dual burners to \$30 and that the only way to cope
23 with such price drops is to minimize production costs by expanding economy of scale.

24 f. On July 30, 2006, it was reported that NEC had lowered its contract-
25 manufacturing quotes for 16x DVD burners from \$35 to below \$30, as a price war loomed among
26 the world's ODD markets, amid growing competition. Lite-On said in response that it had no plans
27 for follow suit.

28

1 g. On February 8, 2007, industry journals reported that HLDS and TSST had
2 slashed prices for their OEM DVD burners to 10 percent lower than normal retail quotes in China
3 due to oversupply and weaker-than-expected Vista demand.

4 h. On February 15, 2007, Lite-On indicated that OEM quotes for DVD burners
5 were slipping due to price competition from global leading makers such as TSST. Lite-On
6 indicated that the price competition may last until global demand for next-generation blue-laser
7 burners reached a certain level.

8 i. On March 29, 2007, trade sources reported that Lite-On and TSST started
9 reducing quotes for 18x DVD models by 8-10 percent to clear out inventory and accelerate their
10 migration to 20x DVD burners.

11 308. In addition, during the Class Period, Defendants gave false and pretextual reasons
12 for ODD Product price increases or price stabilization during the relevant period, and described
13 such pricing falsely as being the result of external causes rather than collusion:

14 a. In August 2004, Lite-On raised its OEM quotation for half-height combo
15 drives by 3 to 5 percent to \$35-40, according to Michael Gong, general manager of the company's
16 ODD unit. Gong attributed the increase in price to a shortage of pick-up heads produced by Japan-
17 based Sankyo. Gong also represented that Lite-On had been forced to cut its production by ten to
18 fifteen percent due to the short supply of pick-up heads.

19 b. For example, in the latter part of 2004, after a period of decline, quotations
20 by Defendants to OEMs for 16x DVD-R players stabilized for a period of months. By September
21 of 2004, Taiwanese ODD makers were claiming that the prices of such burners would remain
22 stable for the remainder of the year.

23 c. On December 15, 2004, leading ODD manufacturers reported that the short
24 supply of pick-up heads used in half-height and slim DVD burners and slip-type combo drives is
25 currently 20 to 30 percent short of the demand based on received orders. Michael Gong, the ODD
26 business general manager for Lite-On, indicated that the short supply of pick-up heads used in
27 ODDs is mainly attributable to growing adoption of slim-type DVD burners by main international
28 notebook PC brands as well as low yield rates for prisms, a key component of pick-up heads.

1 d. On March 7, 2005, Lite-On president Danny Liao reported that the intense
2 price competition for the global ODD market seen in 2004 will slacken in 2005 because Japanese
3 players have forced out most of Taiwan's second-tier makers and almost all of China's
4 manufacturers.

5 e. In June 2006, it was announced that Dell, HP and other PC vendors had
6 temporarily stopped their online procurement of ODDs mainly due to fewer competitors. BenQ had
7 just sold its ODD business unit to Lite-On and TSST decided not to join in such bidding. Michael
8 Gong of Lite-On confirmed the temporary stoppage of online bidding and said that it would help
9 OEM prices for ODDs to stay at a reasonable level.

10 f. In May of 2007, ODD manufacturers reported supply capacities 10 to 20
11 percent below demand for international and notebook PC brands. Industry sources in Taiwan
12 reported that since April 2007, supply capacities from leading ODD manufacturers had been 10 to
13 20 percent below demand.

14 g. In May of 2007, Sony NEC Optiarc, Inc. introduced its first BD-R player,
15 the BD-M100A. According to Digitimes, sources from Taiwan-based manufacturers of ODDs said
16 that since Sony NEC and Pioneer were members of the BDA, their pricing would be a reference for
17 other members who manufactured such an ODD, including Philips, LG Electronics and Samsung.

18 h. In June of 2007, Charlie Tseng of the ODD unit of PLDS reported that while
19 aiming for large shipment volumes, PLDS would maintain steady profits and therefore would
20 maintain a minimum gross margin by refusing low-priced orders as well as not participating in
21 price-cutting competition.

22 i. On August 23, 2007, the business division general manager of HLDS stated
23 that supply of pick-up heads was not expected to increase for the time being, and so the current
24 level of ODD prices were not expected to drop the following quarter.

25 j. In October 2007, the component shortage of pick-up heads was intensifying,
26 and that HLDS was only able to meet 85 to 90 percent of its order volume due to a shortage of
27 main components. At the same time, Lite-On indicated its production capacity in China was
28 completely booked.

1 k. In February of 2008, prices on many ODDs that played BDs began to climb.
2 In August of 2008, personal computer vendors, including HP, Dell, Acer and Asustek Computer,
3 sought reductions in the OEM and Original Design Manufacturer ("ODM") prices of BD Combo
4 and BD-ROM drives. At the time, ODM/OEM quotations were at \$120-\$130 for a BD Combo
5 drive and \$95-\$100 for a BD-ROM drive, but computer vendors asked for the lowering of the
6 former by \$20-\$30 and the latter by \$5-\$10. Leading ODM/OEM makers, such as Pioneer, Lite-
7 On, HLDS and TSST were all steadfast in refusing to lower current quotations, however. Andy
8 Parsons, Chairman of the BDA and a Senior Vice-President of Pioneer, said in October of 2008
9 that the prices for BD players would not be coming down soon.

10 l. In May 2008, Lite-On and Quanta announced they were planning to increase
11 their OEM pricing of ODDs by three to ten percent. Industry sources stated that the pricing
12 increases were due to an increase in the costs of key materials and components.

13 m. In August 2008, it was reported that although PC vendors including HP,
14 Dell, Acer and Asustek Computer wanted considerably large reduction in ODM/OEM prices of BD
15 Combo and BD-ROM drives, none of the ODD manufacturers were willing to cut prices because
16 they were unable to keep down component costs and were reluctant to sacrifice profitability for
17 orders.

18 n. In September 2008, it was reported that PC vendors including HP, Acer, and
19 Asustek Computer had asked ODD suppliers, including HLDS, TSST and Lite-On to decrease
20 quotes to less than \$100 for BD Combo drives and \$70-\$80 for a BD-ROM drive as the main
21 condition for their adopting the devices in large volumes. The ODD suppliers were looking to
22 maintain profits in the BD segment, however, and were looking to avoid competition through
23 price-cuts, according to industry sources.

24 309. In their filings with the SEC, Defendants repeatedly stated that they faced intense
25 price competition in the ODD market.

26 310. For example, in its Form 20-F, filed with the SEC on August 20, 2004, Defendant
27 Hitachi stated:

1 The industrial sectors and business lines in which Hitachi is engaged
2 are experiencing increasingly intense competition. Hitachi competes
3 with diverse competitors ranging from huge global corporations to
4 specialized companies. Competitors are increasingly manufacturing
5 products, including sophisticated electronic products, in low-cost
6 jurisdictions. Globalization of markets and commoditization of such
7 products are making price competition in the business sectors in
8 which Hitachi is engaged increasingly intense. ***Products which are***
9 ***facing intense price competition or decreases in prices include***
10 ***computer-related products***, such as hard disk drives, disk array
11 subsystems and ***optical disk drives***, semiconductors, liquid crystal
12 displays, digital media products and home appliances. To succeed in
13 this competitive environment, Hitachi believes its products and
14 services must be competitive in terms of price, engineering expertise,
15 quality and brand value. Hitachi cannot be certain that each or any of
16 the products or services that it offers will be competitive, and should
17 each or any such products or services fail to be competitive, Hitachi's
18 business results may be negatively affected.

19 311. Hitachi repeated substantially the same statement in its subsequent Form 20-Fs,
20 filed with the SEC on August 26, 2005, August 7, 2006, June 26, 2007 and July 27, 2009.

21 312. In its Form 6-K, filed with the SEC on April 27, 2005, Defendant NEC stated that
22 "increasingly harsh competition" had resulted in "a drop in average selling prices for optical disc
23 drives." Substantially the same statement was repeated in NEC's Form 6-Ks, filed on May 31,
24 2005.

25 313. The affirmative acts of Defendants alleged herein, including acts in furtherance of
26 the conspiracy, were wrongfully concealed and carried out in a manner that precluded detection.

27 314. The affirmative acts of Defendants and their co-conspirators alleged herein, among
28 others, including acts in furtherance of the conspiracy, were wrongfully concealed and carried out
in a manner that precluded detection. The conspirators knew their activities were illegal.

315. By its very nature, Defendants' price-fixing conspiracy was inherently self-
concealing. The ODD industry is not exempt from antitrust regulation, and thus, before October 26,
2009 (and June 3, 2011 as it relates to the Pioneer defendants), Indirect Purchaser Plaintiffs
reasonably considered it to be a well-regulated competitive industry.

316. In the context of the circumstances surrounding Defendants' pricing practices,
Defendants' acts of concealment were more than sufficient to preclude suspicion by a reasonable
person that Defendants' pricing was conspiratorial. Accordingly, a reasonable person under the

1 circumstances would not have been alerted to investigate the legitimacy of Defendants' ODD
2 prices before October 26, 2009, and the involvement of the Pioneer defendants before June 3,
3 2011.

4 317. Indirect Purchaser Plaintiffs could not have discovered the alleged contract,
5 conspiracy or combination at an earlier date by the exercise of reasonable diligence because of the
6 deceptive practices and techniques of secrecy employed by the Defendants and their co-
7 conspirators to avoid detection of, and fraudulently conceal, their contract, combination or
8 conspiracy.

9 318. Because the alleged conspiracy was both self-concealing and affirmatively
10 concealed by Defendants and their co-conspirators, Indirect Purchaser Plaintiffs had no knowledge
11 of the alleged conspiracy, or of any facts or information that would have caused a reasonably
12 diligent person to investigate whether a conspiracy existed, until October 26, 2009, when reports of
13 the investigations into price fixing in the ODD industry were first publicly disseminated and June
14 3, 2011 when plaintiffs first started to learn of the actions of the Pioneer defendants.

15 319. None of the facts or information available to Indirect Purchaser Plaintiffs prior to
16 October 26, 2009, if investigated with reasonable diligence, could or would have led to the
17 discovery of the conspiracy alleged herein prior to October 26, 2009 and June 3, 2011 when
18 plaintiffs first started to learn of the actions of the Pioneer defendants.

19 320. As a result of Defendants' fraudulent concealment of their conspiracy, the running
20 of any statute of limitations has been tolled with respect to any claims that Indirect Purchaser
21 Plaintiffs and members of the class have as a result of the anticompetitive conduct alleged in this
22 complaint.

23 VI. JURISDICTION AND VENUE

24 321. Indirect Purchaser Plaintiffs bring this action under Section 1 of the Sherman Act,
25 15 U.S.C. § 1, and Section 16 of the Clayton Act, 15 U.S.C. § 26, to obtain injunctive relief against
26 all Defendants.

27 322. Indirect Purchaser Plaintiffs also bring this action pursuant to state antitrust, unfair
28 competition and consumer protection laws to recover damages, restitution, disgorgement, costs of

1 suit, including reasonable attorneys' fees, for the injuries that Indirect Purchaser Plaintiffs and all
2 others similarly situated sustained as a result of Defendants' violations of those laws.

3 323. The Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1337 over
4 Indirect Purchaser Plaintiffs' claims under Section 1 of the Sherman Act and Sections 4 and 16 of
5 the Clayton Act. The Court has supplemental jurisdiction over Indirect Purchaser Plaintiffs' state
6 law claims under 28 U.S.C. § 1367. The Indirect Purchaser Plaintiffs' state law claims are so
7 related to their claims under Section 1 of the Sherman Act and Sections 4 and 16 of the Clayton
8 Act that they form part of the same case or controversy.

9 324. This Court also has subject matter jurisdiction over the state law claims pursuant to
10 the Class Action Fairness Act of 2005, which amended 28 U.S.C. § 1332 to add a new subsection
11 (d) conferring federal jurisdiction over class actions where, as here, "any member of a class of
12 Plaintiffs is a citizen of a state different from any Defendant and the aggregated amount in
13 controversy exceeds \$5,000,000, exclusive of interest and costs." This Court also has jurisdiction
14 under 28 U.S.C. § 1332(d) because "one or more members of the class is a citizen of a state within
15 the United States and one or more of the Defendants is a citizen or subject of a foreign state."

16 325. This court has jurisdiction over each Defendant named in this action under both
17 Section 12 of the Clayton Act, 15 U.S.C. § 22 and California Code of Civil Procedure section
18 § 410.10. Each Defendant conducts substantial business in the state of California, and a number of
19 Defendants maintain their headquarters in this District or elsewhere in California. In addition,
20 Defendants all purposefully availed themselves of the laws of the United States and California
21 insofar as they manufactured ODDs for sale in the United States and California.

22 326. Venue is proper in this District under Section 12 of the Clayton Act, 15 U.S.C. § 22
23 and 28 U.S.C. § 1391, because each Defendant is either an alien corporation, transacts business in
24 this District, or is otherwise found within this District. In addition, venue is proper in this District
25 under 28 U.S.C. § 1391 because a substantial part of the events giving rise to this claim occurred in
26 this District.

A. Indirect Purchaser Plaintiffs

329. Plaintiff Chris Johnson is a resident of Woodland Hills, California. During the Class Period and while residing in California, Plaintiff Johnson indirectly purchased an ODD Product for his own use and not for resale that was manufactured by one or more Defendants or their co-conspirators. Plaintiff Johnson suffered injury as a result of Defendants' conduct alleged herein. Hereinafter, Plaintiff Johnson is referred to as the "California Plaintiff."

330. Plaintiff Evan Jacobson is a resident of the District of Columbia. During the Class Period and while residing in D.C., Plaintiff Jacobson indirectly purchased an ODD Product for his own use and not for resale that was manufactured by one of more Defendants or their co-conspirators. Plaintiff Jacobson suffered injury as a result of Defendants' conduct alleged herein. Hereinafter, Plaintiff Jacobson is referred to as the "D.C. Plaintiff."

331. Plaintiff Lisa Melegari is a resident of Orlando, Florida. During the Class Period and while residing in Florida, Plaintiff Melegari indirectly purchased an ODD Product for her own use and not for resale that was manufactured by one or more Defendants or their co-conspirators. Plaintiff Melegari suffered injury as a result of Defendants' conduct alleged herein. Hereinafter, Plaintiff Melegari is referred to as the "Florida Plaintiff."

332. Plaintiff Barney Gooman, Jr. is a resident of Honolulu, Hawaii. During the Class Period and while residing in Hawaii, Plaintiff Gooman indirectly purchased an ODD Product for his own use and not for resale that was manufactured by one or more Defendants or their co-

1 conspirators. Plaintiff Gooman suffered injury as a result of Defendants' conduct alleged herein.
2 Hereinafter, Plaintiff Gooman is referred to as the "Hawaii Plaintiff."

3 333. Plaintiff Benjamin Murray is a resident of Kansas City, Kansas. During the Class
4 Period and while residing in Kansas, Plaintiff Murray indirectly purchased an ODD Product for his
5 own use and not for resale that was manufactured by one or more Defendants or their co-
6 conspirators. Plaintiff Murray suffered injury as a result of Defendants' conduct alleged herein.
7 Hereinafter, Plaintiff Murray is referred to as the "Kansas Plaintiff."

8 334. Plaintiff Thomas Stenger is a resident of Sebago, Maine. During the Class Period
9 and while residing in Maine, Plaintiff Stenger indirectly purchased an ODD Product for his own
10 use and not for resale that was manufactured by one or more Defendants or their co-conspirators.
11 Plaintiff Stenger suffered injury as a result of Defendants' conduct alleged herein. Hereinafter,
12 Plaintiff Stenger is referred to as the "Maine Plaintiff."

13 335. Plaintiff James Ito-Adler is a resident of Belmont, Massachusetts. During the Class
14 Period and while residing in Massachusetts, Plaintiff Ito-Adler indirectly purchased an ODD
15 Product for his own use and not for resale that was manufactured by one or more Defendants or
16 their co-conspirators. Plaintiff Ito-Adler suffered injury as a result of Defendants' conduct alleged
17 herein. Hereinafter, Plaintiff Ito-Adler is referred to as the "Massachusetts Plaintiff."

18 336. Plaintiff Sandra Steffen is a resident of Livonia, Michigan. During the Class Period
19 and while residing in Michigan, Plaintiff Steffen indirectly purchased an ODD Product for her own
20 use and not for resale that was manufactured by one or more Defendants or their co-conspirators.
21 Plaintiff Steffen suffered injury as a result of Defendants' conduct alleged herein. Hereinafter,
22 Plaintiff Steffen is referred to as the "Michigan Plaintiff."

23 337. Plaintiff Alex Bissen is a resident of Minneapolis, Minnesota. During the Class
24 Period and while residing in Minnesota, Plaintiff Bissen indirectly purchased an ODD Product for
25 his own use and not for resale that was manufactured by one or more Defendants or their co-
26 conspirators. Plaintiff Bissen suffered injury as a result of Defendants' conduct alleged herein.
27 Hereinafter, Plaintiff Bissen is referred to as the "Minnesota Plaintiff."

1 338. Plaintiff Benjamin Faber is a resident of Columbia, Missouri. During the Class
2 Period and while residing in Missouri, Plaintiff Faber indirectly purchased an ODD Product for his
3 own use and not for resale that was manufactured by one or more Defendants or their co-
4 conspirators. Plaintiff Faber suffered injury as a result of Defendants' conduct alleged herein.
5 Hereinafter, Plaintiff Faber is referred to as the "Missouri Plaintiff."

6 339. Plaintiff Matthew Hosking is a resident of Helena, Montana. During the Class
7 Period and while residing in Montana, Plaintiff Hosking indirectly purchased an ODD Product for
8 his own use and not for resale that was manufactured by one or more Defendants or their co-
9 conspirators. Plaintiff Hosking suffered injury as a result of Defendants' conduct alleged herein.
10 Hereinafter, Plaintiff Hosking is referred to as the "Montana Plaintiff."

11 340. Plaintiff Cindy Booze is a resident of Lincoln, Nebraska. During the Class Period
12 and while residing in Nebraska, Plaintiff Booze indirectly purchased an ODD Product for her own
13 use and not for resale that was manufactured by one or more Defendants or their co-conspirators.
14 Plaintiff Booze suffered injury as a result of Defendants' conduct alleged herein. Hereinafter,
15 Plaintiff Booze is referred to as the "Nebraska Plaintiff."

16 341. Plaintiff Matthew Ence is a resident of Minden, Nevada. During the Class Period
17 and while residing in Nevada, Plaintiff Ence indirectly purchased an ODD Product for his own use
18 and not for resale that was manufactured by one or more Defendants or their co-conspirators.
19 Plaintiff Ence suffered injury as a result of Defendants' conduct alleged herein. Hereinafter,
20 Plaintiff Ence is referred to as the "Nevada Plaintiff."

21 342. Plaintiff Evan Ravenelle is a resident of Manchester, New Hampshire. During the
22 Class Period and while residing in New Hampshire, Plaintiff Ravenelle indirectly purchased an
23 ODD Product for his own use and not for resale that was manufactured by one or more Defendants
24 or their co-conspirators. Plaintiff Ravenelle suffered injury as a result of Defendants' conduct
25 alleged herein. Hereinafter, Plaintiff Ravenelle is referred to as the "New Hampshire Plaintiff."

26 343. Plaintiff Michael Reilly is a resident of Albuquerque, New Mexico. During the
27 Class Period and while residing in New Mexico, Plaintiff Reilly indirectly purchased an ODD
28 Product for his own use and not for resale that was manufactured by one or more Defendants or

1 their co-conspirators. Plaintiff Reilly suffered injury as a result of Defendants' conduct alleged
2 herein. Hereinafter, Plaintiff Reilly is referred to as the "New Mexico Plaintiff."

3 344. Plaintiff Susie Lim is a resident of New York, New York. During the Class Period
4 and while residing in New York, Plaintiff Lim indirectly purchased an ODD Product for her own
5 use and not for resale that was manufactured by one or more Defendants or their co-conspirators.
6 Plaintiff Lim suffered injury as a result of Defendants' conduct alleged herein. Hereinafter,
7 Plaintiff Lim is referred to as the "New York Plaintiff."

8 345. Plaintiff Angela Pritchard is a resident of Lexington, North Carolina. During the
9 Class Period and while residing in North Carolina, Plaintiff Pritchard indirectly purchased an ODD
10 Product for her own use and not for resale that was manufactured by one or more Defendants or
11 their co-conspirators. Plaintiff Pritchard suffered injury as a result of Defendants' conduct alleged
12 herein. Hereinafter, Plaintiff Pritchard is referred to as the "North Carolina Plaintiff."

13 346. Plaintiff Mike Bishop is a resident of Portland, Oregon. During the Class Period and
14 while residing in Oregon, Plaintiff Bishop indirectly purchased an ODD Product for his own use
15 and not for resale that was manufactured by one or more Defendants or their co-conspirators.
16 Plaintiff Bishop suffered injury as a result of Defendants' conduct alleged herein. Hereinafter,
17 Plaintiff Bishop is referred to as the "Oregon Plaintiff."

18 347. Plaintiff Kimberly Wood is a resident of Enville, Tennessee. During the Class
19 Period and while residing in Tennessee, Plaintiff Wood indirectly purchased an ODD Product for
20 her own use and not for resale that was manufactured by one or more Defendants or their co-
21 conspirators. Plaintiff Wood suffered injury as a result of Defendants' conduct alleged herein.
22 Hereinafter, Plaintiff Wood is referred to as the "Tennessee Plaintiff."

23 348. Plaintiff Benjamin Porter is a resident of North Salt Lake, Utah. During the Class
24 Period and while residing in Utah, Plaintiff Porter indirectly purchased an ODD Product for his
25 own use and not for resale that was manufactured by one or more Defendants or their co-
26 conspirators. Plaintiff Porter suffered injury as a result of Defendants' conduct alleged herein.
27 Hereinafter, Plaintiff Porter is referred to as the "Utah Plaintiff."

1 349. Plaintiff Gail Murphy was a resident at all relevant times of Shelburne, Vermont.
 2 During the Class Period and while residing in Vermont, Plaintiff Murphy indirectly purchased an
 3 ODD Product for her own use and not for resale that was manufactured by one or more Defendants
 4 or their co-conspirators. Plaintiff Murphy suffered injury as a result of Defendants' conduct alleged
 5 herein. Hereinafter, Plaintiff Murphy is referred to as the "Vermont Plaintiff."

6 350. Plaintiff John McKee is a resident of Green Bay, Wisconsin. During the Class
 7 Period and while residing in Wisconsin, Plaintiff McKee indirectly purchased an ODD Product for
 8 his own use and not for resale that was manufactured by one or more Defendants or their co-
 9 conspirators. Plaintiff McKee suffered injury as a result of Defendants' conduct alleged herein.
 10 Hereinafter, Plaintiff McKee is referred to as the "Wisconsin Plaintiff."

11 **B. Defendants**

12 351. Defendant Hitachi, Ltd. is a Japanese company with its principal executive office at
 13 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8280, Japan. During the Class Period, Hitachi
 14 designed and/or manufactured ODDs with the intent and agreement to distribute throughout the
 15 United States.

16 352. Defendant LG Electronics, Inc. is a Korean entity headquartered at LG Twin
 17 Towers 20, Yoido-dong, Youngdungpo-gu, Seoul, South Korea 150-721. During the Class Period,
 18 LG Electronics designed and/or manufactured ODDs with the intent and agreement to distribute
 19 throughout the United States.

20 353. Hitachi-LG Data Storage, Inc. is a joint venture between Defendants Hitachi, Ltd.
 21 and LG Electronics, Inc., with its principal place of business located at 4F MSC Center Bldg., 22-
 22 23, Kaigan 3-chome, Minato-Ku, Tokyo 108-0022, Japan. Hitachi, Ltd. owns 51 percent of the
 23 stock in HLDS, while LG Electronics owns the remaining 49 percent. Hitachi and LG Electronics
 24 jointly control and direct the operations of Hitachi-LG Data Storage, Inc. Hitachi-LG Data Storage,
 25 Inc. was established in November of 2000 and started operation in January of 2001. Between 2001
 26 and 2005 Hitachi-LG Data Storage, Inc. sold over 170 million optical disk drives, generating
 27 approximately \$5.5 billion in total revenues. During the Class Period, Hitachi-LG Data Storage,
 28

1 Inc. designed and/or manufactured ODDs with the intent and agreement to distribute throughout
2 the United States.

3 354. Hitachi-LG Data Storage Korea, Inc. is a joint venture between Defendants Hitachi
4 and LG Electronics, with its principal place of business located at LG Gasan Digital Center, 459-9
5 Gasan-dong, Geumcheon-gu, Seoul, 153-803 Korea. Hitachi owns 51 percent of the stock in
6 Hitachi-LG Data Storage Korea, Inc., while LG Electronics owns the remaining 49 percent. Hitachi
7 and LG Electronics jointly control and direct the operations of Hitachi-LG Data Storage Korea,
8 Inc. Hitachi-LG Data Storage Korea, Inc. was established in November of 2000 and started
9 operation in January of 2001. Between 2001 and 2005, Hitachi-LG Data Storage Korea, Inc. sold
10 over 170 million optical disk drives, generating approximately \$5.5 billion in total revenues.
11 During the Class Period, Hitachi-LG Data Storage Korea, Inc. designed and/or manufactured
12 ODDs with the intent and agreement to distribute throughout the United States.

13 355. Defendant BenQ Corporation is a Taiwanese company, with its principal place of
14 business at 16 Jihu Rd., Neihsu, Taipei 114, Taiwan. During the Class Period, BenQ Corporation,
15 designed and/or manufactured ODDs with the intent and agreement to distribute throughout the
16 United States.

17 356. Defendant BenQ America Corp. is a California corporation with its principal place
18 of business at 15375 Barranca Parkway, Suite A-205, Irvine, California 92618. BenQ America
19 Corp. is a wholly owned and controlled subsidiary of BenQ Corporation. During the Class Period,
20 BenQ America Corp. designed and/or manufactured ODDs with the intent and agreement to
21 distribute throughout the United States.

22 357. Defendant Koninklijke Philips Electronics N.V. (translated into English as Royal
23 Philips Electronics) is a Dutch company with its principal place of business at Amstelplein 2,
24 Breitner Center, PO Box 77900, Amsterdam, 1070 MX, The Netherlands. During the Class Period,
25 Philips designed and/or manufactured ODDs with the intent and agreement to distribute throughout
26 the United States.

27 358. Defendant Lite-On IT Corporation is a Taiwanese company with its principal place
28 of business at 12-15F, 392, Ruey Kuang Road, Taipei City, TAP 11492, Taiwan. During the Class

1 Period, Lite-On designed and/or manufactured ODDs with the intent and agreement to distribute
2 throughout the United States.

3 359. Defendant Philips & Lite-On Digital Solutions Corp. is a Taiwanese company with
4 its principal place of business at 16F, 392, Ruey Kuang Road, Taipei City, TAP 11492, Taiwan.
5 Philips & Lite-On Digital Solutions Corp. is a joint venture established in 2007 between Philips
6 and Lite-On. During the Class Period, Philips & Lite-On Digital Solutions Corp. designed and/or
7 manufactured ODDs with the intent and agreement to distribute throughout the United States.

8 360. Defendant Philips & Lite-On Digital Solutions USA, Inc. is a subsidiary of Philips
9 & Lite-On Digital Solutions Corp. and is a Delaware corporation with its principal place of
10 business at 42000 Christy St., Fremont, California 94538. During the Class Period, Philips & Lite-
11 On Digital Solutions USA, Inc. designed and/or manufactured ODDs with the intent and agreement
12 to distribute throughout the United States.

13 361. Defendant Sony Corp. is a Japanese company with its principal place of business at
14 1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan. During the Class Period, Sony designed and/or
15 manufactured ODDs with the intent and agreement to distribute throughout the United States.

16 362. Defendant NEC Corporation is a Japanese company with its principal place of
17 business at 7-1 Shiba, 5-chome, Minato-Ku, Tokyo, 108-8001, Japan. Prior to 2008, NEC owned
18 45 percent of Defendant Sony Optiarc, Inc. During the Class Period, NEC Corporation designed
19 and/or manufactured ODDs with the intent and agreement to distribute throughout the United
20 States.

21 363. Defendant Sony NEC Optiarc, Inc. was a Japanese company with its headquarters
22 located at 4-16-1 Okata, Atsugi-shi, Kanagawa 243-0021, Japan. Defendant Sony NEC Optiarc,
23 Inc. was created on April 3, 2006 as a joint venture between Defendants Sony and NEC in which
24 Sony had a 55 percent interest and NEC had a 45 percent interest. Sony purchased NEC's interest
25 in Sony NEC Optiarc, Inc. in 2008 and renamed it Sony Optiarc, Inc. Sony and NEC exercised
26 joint control over Sony NEC Optiarc, Inc. During the Class Period, Sony NEC Optiarc, Inc.
27 designed and/or manufactured ODDs with the intent and agreement to distribute throughout the
28 United States.

1 364. Defendant Sony Optiarc, Inc. is a Japanese company with its headquarters located at
2 4-16-1 Okata, Atsugi-shi, Kanagawa 243-0021, Japan. Prior to its formation in 2008, defendant
3 Sony Optiarc, Inc. was a joint venture between Defendants Sony and NEC called Sony NEC
4 Optiarc, Inc. On September 11, 2008, Sony purchased NEC's interest in Sony NEC Optiarc, Inc.
5 The company was subsequently renamed Sony Optiarc, Inc. In 2008, Sony Optiarc, Inc. reported
6 revenues of \$1.52 billion. During the Class Period, Sony Optiarc, Inc. designed and/or
7 manufactured ODDs with the intent and agreement to distribute throughout the United States.

8 365. Defendant Sony Optiarc America, Inc. is a wholly owned subsidiary of defendant
9 Sony Optiarc, Inc. Defendant Sony Optiarc America, Inc. is a Delaware corporation with its
10 business headquarters located at 1730 N. 1st Street, San Jose, California 95112. During the Class
11 Period, Sony Optiarc America, Inc. designed and/or manufactured ODDs with the intent and
12 agreement to distribute throughout the United States.

13 366. Defendant Samsung Electronics Co., Ltd. is a Korean company with its principal
14 place of business at 1320-10, Seocho 2-dong, Seocho-gu, Seoul 137-857, South Korea. During the
15 Class Period, Samsung designed and/or manufactured ODDs with the intent and agreement to
16 distribute throughout the United States.

17 367. Defendant Toshiba Corp. is a Japanese company with its principal place of business
18 at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan. During the Class Period, Toshiba
19 designed and/or manufactured ODDs with the intent and agreement to distribute throughout the
20 United States.

21 368. Defendant Toshiba Samsung Storage Technology Corp. is a joint venture of
22 Defendants Toshiba and Samsung that was established on April 1, 2004. Toshiba owns 51 percent
23 of the stock in Toshiba Samsung Storage Technology Corp., while Samsung owns the remaining
24 49 percent. Toshiba Samsung Storage Technology Corp. and Toshiba share corporate headquarters,
25 which are located at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan. Toshiba Corp. and
26 Samsung Electronics Co. Ltd. jointly control Toshiba Samsung Storage Technology Corp. Toshiba
27 Samsung Storage Technology Corp. forecasted revenue of ¥250 billion in fiscal 2004, when it was
28

1 established. During the Class Period, Toshiba Samsung Storage Technology Corp. designed and/or
2 manufactured ODDs with the intent and agreement to distribute throughout the United States.

3 369. Defendant Toshiba Samsung Storage Technology Corp. Korea is a joint venture of
4 Defendants Toshiba and Samsung that was established on April 1, 2004. Toshiba owns 51 percent
5 of the stock in Toshiba Samsung Storage Technology Corp. Korea, while Samsung owns the
6 remaining 49 percent. Toshiba Samsung Storage Technology Corp. Korea is a business entity
7 organized under the laws of South Korea with its principal place of business located at Digital
8 Empire 2, 486-1, Sin-dong, Yeongton-gu, Suwon-si, Gyonggi-do, Korea 443-734. Toshiba and
9 Samsung jointly control Toshiba Samsung Storage Technology Corp. Korea. During the Class
10 Period, Toshiba Samsung Storage Technology Corp. Korea designed and/or manufactured ODDs
11 with the intent and agreement to distribute throughout the United States.

12 370. Defendant Panasonic Corporation, is a Japanese entity with its principal place of
13 business at 1006 Oaza Kadoma, Kadoma, Osaka 571-8501, Japan. Up until October 1, 2008,
14 Panasonic Corporation was known as Matsushita Electric Industrial Co., Ltd. During the Class
15 Period, Panasonic Corporation designed and/or manufactured ODDs with the intent and agreement
16 to distribute throughout the United States.

17 371. Defendant Panasonic Corporation of North America, formerly known as Matsushita
18 Electric Corporation of America, is a Delaware corporation with its principal place of business at 1
19 Panasonic Way, Secaucus, New Jersey. Panasonic Corporation of North America is a wholly
20 owned and controlled subsidiary of Panasonic Corporation. During the Class Period, Panasonic
21 Corporation of North America designed and/or manufactured ODDs with the intent and agreement
22 to distribute throughout the United States.

23 372. Defendant TEAC America Inc. is a business entity organized under the laws of
24 California, with its principal place of business at 7733 Telegraph Rd., Montebello, California,
25 90640. TEAC America Inc. is a wholly owned subsidiary of Defendant TEAC Corporation. During
26 the Class Period, TEAC America Inc. designed and/or manufactured ODDs with the intent and
27 agreement to distribute throughout the United States.

1 373. Defendant TEAC Corporation is a Japanese company with its principal place of
2 business at 47 Ochiai 1-chome, Tama-shi, Tokyo 206-8530, Japan. TEAC Corporation controls
3 TEAC America Inc. During the Class Period, TEAC Corporation designed and/or manufactured
4 ODDs with the intent and agreement to distribute throughout the United States.

5 374. Defendant Quanta Storage America, Inc. is a California corporation with its
6 principal place of business in Fremont, California . Quanta America is a wholly owned and
7 controlled subsidiary of Defendant Quanta Storage, Inc. During the Class Period, Quanta America
8 designed and/or manufactured ODDs with the intent and agreement to distribute throughout the
9 United States.

10 375. Defendant Quanta Storage Inc. is a Taiwanese entity with its principal place of
11 business at 3F, No.188, Wenhua 2nd Rd., Guishan Shiang, Taoyuan County 333, Taiwan. Quanta
12 Storage was incorporated on February 10, 1999 in Taoyuan County, Taiwan. During the Class
13 Period Quanta Storage designed and/or manufactured ODDs with the intent and agreement to
14 distribute throughout the United States.

15 376. Defendant Pioneer Electronics (USA) Inc. ("Pioneer USA") is a U.S. company with
16 its principal place of business at 1925 E Dominguez Street, Long Beach, California 90810. During
17 the Class Period, Pioneer USA designed, manufactured and distributed ODDs throughout the
18 United States. Defendant Pioneer USA is a wholly owned subsidiary of defendant Pioneer North
19 America, Inc.

20 377. Defendant Pioneer North America, Inc. ("Pioneer N.A.") is a U.S. company with its
21 principal place of business at 1925 E Dominguez Street, Long Beach, California 90810. During the
22 Class Period, Pioneer N.A. designed, manufactured and/or distributed ODDs throughout the United
23 States. Defendant Pioneer N.A is a wholly owned subsidiary of defendant Pioneer Corporation.

24 378. Defendant Pioneer Corporation is a Japanese company with its headquarters located
25 at 1-1 Shin-ogura, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0031, Japan. During the Class Period,
26 Pioneer Corporation designed and/or manufactured ODDs with the intent and agreement to
27 distribute throughout the United States.

28

380. Indirect Purchaser Plaintiffs bring this action on their own behalf and on behalf of a class of persons pursuant to Federal Rules of Civil Procedure 23. The Class is defined as follows:

Excluded from the class are Defendants; the officers, directors or employees of any Defendant; any entity in which any Defendant has a controlling interest; and any affiliate, legal representative, heir or assign of any Defendant. Also excluded are any federal, state, or local governmental entities, any judicial officers presiding over this action and the members of his/her immediate family and judicial staff, and any juror assigned to this action.

a. **Arizona Indirect Purchaser Class:** All persons and entities who, as residents of Arizona, indirectly purchased a new ODD Product during the Class Period for their own use and not for resale that contained an ODD manufactured by one or more Defendants or their co-conspirators.

b. **California Indirect Purchaser Class:** All persons and entities who, as residents of California, indirectly purchased a new ODD Product during the Class Period for their own use and not for resale that contained an ODD manufactured by one or more Defendants or their co-conspirators.

1 c. **District of Columbia Indirect Purchaser Class:** All persons and entities
2 who, as residents of the District of Columbia, indirectly purchased a new ODD Product during the
3 Class Period for their own use and not for resale that contained an ODD manufactured by one or
4 more Defendants or their co-conspirators.

5 d. **Florida Indirect Purchaser Class:** All persons and entities who, as
6 residents of Florida, indirectly purchased a new ODD Product during the Class Period for their own
7 use and not for resale that contained an ODD manufactured by one or more Defendants or their co-
8 conspirators.

9 e. **Hawaii Indirect Purchaser Class:** All persons and entities who, as residents
10 of Hawaii, indirectly purchased a new ODD Product during the Class Period for their own use and
11 not for resale that contained an ODD manufactured by one or more Defendants or their co-
12 conspirators.

13 f. **Kansas Indirect Purchaser Class:** All persons and entities who, as
14 residents of Kansas, indirectly purchased a new ODD Product during the Class Period for their own
15 use and not for resale that contained an ODD manufactured by one or more Defendants or their co-
16 conspirators.

17 g. **Maine Indirect Purchaser Class:** All persons and entities who, as residents
18 of Maine, indirectly purchased a new ODD Product during the Class Period for their own use and
19 not for resale that contained an ODD manufactured by one or more Defendants or their co-
20 conspirators.

21 h. **Massachusetts Indirect Purchaser Class:** All persons and entities who, as
22 residents of Massachusetts, indirectly purchased a new ODD Product during the Class Period for
23 their own use and not for resale that contained an ODD manufactured by one or more Defendants
24 or their co-conspirators.

25 i. **Michigan Indirect Purchaser Class:** All persons and entities who, as
26 residents of Michigan, indirectly purchased a new ODD Product during the Class Period for their
27 own use and not for resale that contained an ODD manufactured by one or more Defendants or
28 their co-conspirators.

1 j. **Minnesota Indirect Purchaser Class:** All persons and entities who, as
2 residents of Minnesota, indirectly purchased a new ODD Product during the Class Period for their
3 own use and not for resale that contained an ODD manufactured by one or more Defendants or
4 their co-conspirators.

5 k. **Missouri Indirect Purchaser Class:** All persons and entities who, as
6 residents of Missouri, indirectly purchased a new ODD Product during the Class Period for their
7 own use and not for resale that contained an ODD manufactured by one or more Defendants or
8 their co-conspirators.

9 l. **Montana Indirect Purchaser Class:** All persons and entities who, as
10 residents of Montana, indirectly purchased a new ODD Product during the Class Period for their
11 own use and not for resale that contained an ODD manufactured by one or more Defendants or
12 their co-conspirators.

13 m. **Nebraska Indirect Purchaser Class:** All persons and entities who, as
14 residents of Nebraska, indirectly purchased a new ODD Product during the Class Period for their
15 own use and not for resale that contained an ODD manufactured by one or more Defendants or
16 their co-conspirators.

17 n. **Nevada Indirect Purchaser Class:** All persons and entities who, as
18 residents of Nevada, indirectly purchased a new ODD Product during the Class Period for their
19 own use and not for resale that contained an ODD manufactured by one or more Defendants or
20 their co-conspirators.

21 o. **New Hampshire Indirect Purchaser Class:** All persons and entities who,
22 as residents of New Hampshire, indirectly purchased a new ODD Product during the Class Period
23 for their own use and not for resale that contained an ODD manufactured by one or more
24 Defendants or their co-conspirators.

25 p. **New Mexico Indirect Purchaser Class:** All persons and entities who, as
26 residents of New Mexico, indirectly purchased a new ODD Product during the Class Period for
27 their own use and not for resale that contained an ODD manufactured by one or more Defendants
28 or their co-conspirators.

1 q. **New York Indirect Purchaser Class:** All persons and entities who, as
2 residents of New York, indirectly purchased a new ODD Product during the Class Period for their
3 own use and not for resale that contained an ODD manufactured by one or more Defendants or
4 their co-conspirators.

5 r. **North Carolina Indirect Purchaser Class:** All persons and entities who, as
6 residents of North Carolina, indirectly purchased a new ODD Product during the Class Period for
7 their own use and not for resale that contained an ODD manufactured by one or more Defendants
8 or their co-conspirators.

9 s. **Oregon Indirect Purchaser Class:** All persons and entities who, as
10 residents of Oregon, indirectly purchased a new ODD Product during the Class Period for their
11 own use and not for resale that contained an ODD manufactured by one or more Defendants or
12 their co-conspirators.

13 t. **Tennessee Indirect Purchaser Class:** All persons and entities who, as
14 residents of Tennessee, indirectly purchased a new ODD Product during the Class Period for their
15 own use and not for resale that contained an ODD manufactured by one or more Defendants or
16 their co-conspirators.

17 u. **Utah Indirect Purchaser Class:** All persons and entities who, as residents
18 of Utah, indirectly purchased a new ODD Product during the Class Period for their own use and
19 not for resale that contained an ODD manufactured by one or more Defendants or their co-
20 conspirators.

21 v. **Vermont Indirect Purchaser Class:** All persons and entities who, as
22 residents of Vermont, indirectly purchased a new ODD Product during the Class Period for their
23 own use and not for resale that contained an ODD manufactured by one or more Defendants or
24 their co-conspirators.

25 w. **Wisconsin Indirect Purchaser Class:** All persons and entities who, as
26 residents of Wisconsin, indirectly purchased a new ODD Product during the Class Period for their
27 own use and not for resale that contained an ODD manufactured by one or more Defendants or
28 their co-conspirators.

1 382. Excluded from the State Classes are Defendants; the officers, directors or employees
2 of any Defendant; any entity in which any Defendant has a controlling interest; and any affiliate,
3 legal representative, heir or assignee of any Defendant. Also excluded are any federal, state, or
4 local governmental entities, any judicial officer presiding over this action and the members of
5 his/her immediate family and judicial staff, and any juror assigned to this action.

6 383. The persons in the Class and State Classes are so numerous that individual joinder
7 of all members is impracticable under the circumstances of this case. Although the precise number
8 of such persons is unknown, the exact size of the Class and State Classes is easily ascertainable, as
9 each class member can be identified by using Defendants' records and/or the records of its
10 distributors or retailers. Plaintiffs are informed and believe that there are many thousands of Class
11 and State Class members.

12 384. Indirect Purchaser Plaintiffs' claims are typical of the claims of the Class and State
13 Classes in that Indirect Purchaser Plaintiffs are indirect purchasers of ODDs, all Class members
14 were damaged by the same wrongful conduct of Defendants and their co-conspirators as alleged
15 herein, and the relief sought is common to the Class.

16 385. There are common questions of law and fact specific to the Class and State Classes
17 that predominate over any questions affecting individual members, including:

18 a. Whether Defendants engaged in a contract, combination, and/or conspiracy
19 to fix, raise, maintain, or stabilize prices of ODDs sold in the United States.

20 b. Whether Defendants engaged in a contract, combination, and/or conspiracy
21 to restrict output of ODDs sold in the United States.

22 c. Whether Defendants' conduct caused the prices of ODDs and ODD Products
23 sold in the United States to be at artificially high and noncompetitive levels;

24 d. Whether Indirect Purchaser Plaintiffs and the other members of the Class
25 and State Classes were injured by Defendants' conduct, and, if so, the appropriate class-wide
26 measure of damages for class members.

1 e. Whether Indirect Purchaser Plaintiffs and the other members of the Class
2 and State Classes are entitled to, among other things, injunctive relief, and if so, the nature and
3 extent of such injunctive relief.

4 386. These and other questions of law and fact are common to the Class and State
5 Classes, and predominate over any questions affecting only individual class members.

6 387. Plaintiffs' claims are typical of the Class and State Classes claim, as they arise out
7 of the same course of conduct and the same legal theories as the rest of the Class and State Classes,
8 and Plaintiffs challenge the practices and course of conduct engaged in by Defendants with respect
9 to the Class and State Classes as a whole.

10 388. Plaintiffs will fairly and adequately protect the interests of the classes. Plaintiffs
11 have retained class counsel who are able and experienced class action litigators.

12 389. Resolution of this action on a class-wide basis is superior to other available methods
13 and is a fair and efficient adjudication of the controversy because in the context of this litigation,
14 no individual class member can justify the commitment of the large financial resources to
15 vigorously prosecute a lawsuit against Defendants. Separate actions by individual class members
16 would also create a risk of inconsistent or varying judgments, which could establish incompatible
17 standards of conduct for Defendants and substantially impede or impair the ability of class
18 members to pursue their claims. A class action also makes sense because Defendants have and
19 refused to take steps that are, upon information and belief, generally applicable to thousands of
20 individuals, thereby making injunctive relief appropriate with respect to the Class as a whole.

21 IX. VIOLATIONS ALLEGED

22 FIRST CLAIM FOR RELIEF 23 (Violations of Sherman Act, 15 U.S.C. § 1)

24 390. Indirect Purchaser Plaintiffs incorporate by reference all the above allegations as if
25 fully set forth herein.

26 391. Beginning at least as early as January 1, 2004, the exact date being unknown to
27 Indirect Purchaser Plaintiffs and exclusively within the knowledge of Defendants, Defendants and
28 their co-conspirators entered into a continuing contract, combination or conspiracy to unreasonably

1 restrain trade and commerce in violation of Section 1 of the Sherman Act (15 U.S.C. § 1) by
2 artificially reducing or eliminating competition in the United States.

3 392. In particular, Defendants have combined and conspired to raise, fix, maintain or
4 stabilize the prices of ODDs sold in the United States.

5 393. As a result of Defendants' unlawful conduct, prices for ODDs were raised, fixed,
6 maintained, and stabilized in the United States.

7 394. The contract, combination or conspiracy among Defendants consisted of a
8 continuing agreement, understanding, and concerted action among Defendants and their co-
9 conspirators.

10 395. For purposes of formulating and effectuating their contract, combination, or
11 conspiracy, Defendants and their co-conspirators did those things they contracted, combined, or
12 conspired to do, including:

- 13 a. Participating in meetings and conversations to discuss the prices and supply
14 of ODDs.
- 15 b. Communicating in writing and orally to fix prices of ODDs.
- 16 c. Agreeing to manipulate prices and supply of ODDs sold in the United States
17 in a manner that deprived direct and indirect purchasers of free and open competition.
- 18 d. Issuing price announcements and price quotations in accordance with the
19 agreements reached.
- 20 e. Selling ODDs and ODD Products to customers in the United States at
21 noncompetitive prices.
- 22 f. Providing false statements to the public to explain increased prices for
23 ODDs.

24 396. As a result of Defendants' unlawful conduct, Indirect Purchaser Plaintiffs and the
25 other members of the Class have been injured in their businesses and property in that they have
26 paid more for ODDs and ODD Products than they otherwise would have paid in the absence of
27 Defendants' unlawful conduct.

28 397. These violations are continuing and will continue unless enjoined by this Court.

1 398. Pursuant to Section 16 of the Clayton Act, 15 U.S.C. § 26, Indirect Purchaser
 2 Plaintiffs and the Nationwide Class seek the issuance of an injunction against Defendants,
 3 preventing and restraining the violations alleged herein.

4 **SECOND CLAIM FOR RELIEF**
 5 **(Violations of the Cartwright Act,**
 6 **Cal. Bus. & Prof. Code §§ 16720, *et seq.*)**

7 399. Indirect Purchaser Plaintiffs incorporate by reference all the above allegations as if
 8 fully set forth herein.

9 400. By reason of the foregoing, Defendants have violated California Business and
 10 Professions Code, §§ 16700, *et seq.* California Plaintiff on behalf of a nationwide class of Indirect
 11 Purchasers alleges as follows.

12 401. Beginning at a time currently unknown to California Plaintiff, but at least as early as
 13 January 1, 2004, and continuing thereafter at least up to the filing of this complaint, Defendants
 14 and their co-conspirators entered into and engaged in a continuing unlawful trust in restraint of the
 15 trade and commerce described above in violation of section 16720, California Business and
 16 Professions Code. Defendants, and each of them, have acted in violation of section 16720 to fix,
 17 raise, stabilize, and maintain prices of, and allocate markets for ODDs at supra-competitive levels.

18 402. In particular, Defendants have combined and conspired to raise, fix, maintain or
 19 stabilize the prices of ODDs sold in the United States.

20 403. As a result of Defendants' unlawful conduct, prices for ODDs were raised, fixed,
 21 maintained, and stabilized in the United States.

22 404. The contract, combination or conspiracy among Defendants consisted of a
 23 continuing agreement, understanding, and concerted action among Defendants and their co-
 24 conspirators.

25 405. For purposes of formulating and effectuating their contract, combination, or
 26 conspiracy, Defendants and their co-conspirators did those things they contracted, combined, or
 27 conspired to do, including:

28 a. Participating in meetings and conversations to discuss the prices and supply
 of ODDs.

- 1 b. Communicating in writing and orally to fix prices of ODDs.
- 2 c. Agreeing to manipulate prices and supply of ODDs sold in the United States
- 3 in a manner that deprived direct and indirect purchasers of free and open competition.
- 4 d. Issuing price announcements and price quotations in accordance with the
- 5 agreements reached.
- 6 e. Selling ODDs to customers in the United States at non-competitive prices.
- 7 f. Providing false statements to the public to explain increased prices for
- 8 ODDs.

9 406. As a direct and proximate result of Defendants' unlawful conduct, California
 10 plaintiffs and the members of the California Indirect Purchaser Class have been injured in their
 11 business and property in that they paid more for ODDs and ODD Products than they otherwise
 12 would have paid in the absence of Defendants' unlawful conduct. As a result of Defendants'
 13 violation of Section 16720 of the California Business and Professions Code, California Plaintiff
 14 and the California Indirect Purchaser Class seek treble damages and their cost of suit, including a
 15 reasonable attorney's fee, pursuant to section 16750(a) of the California Business and Professions
 16 Code.

17 **THIRD CLAIM FOR RELIEF**
 18 **(Violations of California's Unfair Competition Law,**
 Cal. Bus. & Prof. Code §§ 17200, *et seq.*)

19 407. Indirect Purchaser Plaintiffs incorporate by reference the allegations in the above
 20 paragraphs as if fully set forth herein.

21 408. By reason of the foregoing, Defendants have violated California's Unfair
 22 Competition Law, Cal. Bus. & Prof. Code §§ 17200, *et seq.* California Plaintiff on behalf of the
 23 California Indirect Purchaser Class alleges as follows.

24 409. Defendants committed acts of unfair competition, as defined by section 17200, *et*
 25 *seq.*, by engaging in a conspiracy to fix and stabilize the price of ODDs as described above.

26 410. The acts, omissions, misrepresentations, practices and non-disclosures of
 27 Defendants, as described above, constitute a common and continuing course of conduct of unfair
 28 competition by means of unfair, unlawful and/or fraudulent business acts or practices with the

1 meaning of Section 17200, *et seq.*, including, but not limited to (1) violations of Section 1 of the
 2 Sherman Act; and (2) violations of the Cartwright Act.

3 411. Defendants' acts, omissions, misrepresentations, practices and nondisclosures are
 4 unfair, unconscionable, unlawful and/or fraudulent independently of whether they constitute a
 5 violation of the Sherman Act or the Cartwright Act.

6 412. Defendants' acts or practices are fraudulent or deceptive within the meaning of
 7 section 17200, *et seq.*

8 413. Defendants' conduct was carried out, effectuated, and perfected within the state of
 9 California. Defendants maintained offices in California where their employees engaged in
 10 communications, meetings and other activities in furtherance of Defendants' conspiracy.

11 414. By reason of the foregoing, the Class is entitled to application of California law to a
 12 nationwide class and is entitled to full restitution and/or disgorgement of all revenues, earnings,
 13 profits, compensation, and benefits that may have been obtained by Defendants as result of such
 14 business acts and practices described above.

15 **FOURTH CLAIM FOR RELIEF**
 16 **(Violations of State Antitrust and Restraint of Trade Laws)**

17 415. Indirect Purchaser Plaintiffs incorporate by reference the allegations in the above
 18 paragraphs as if fully set forth herein.

19 416. In the event that the Court does not apply California law on a nationwide basis,
 20 Indirect Purchaser Plaintiffs allege the following violations of state antitrust and restraint of trade
 21 laws in the alternative.

22 417. Arizona: By reason of the foregoing, Defendants have violated Arizona Revised
 23 Statutes, §§ 44-1401, *et seq.* Arizona Plaintiff on behalf of the Arizona Indirect Purchaser Class
 24 alleges as follows:

25 a. Defendants' combinations or conspiracies had the following effects:

26 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Arizona;
 27 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
 28 throughout Arizona; (3) Arizona Plaintiff and members of the Arizona Indirect Purchaser Class

1 were deprived of free and open competition; and (4) Arizona Plaintiff and members of the Arizona
2 Indirect Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products;

3 b. During the Class Period, Defendants' illegal conduct substantially affected
4 Arizona commerce.

5 c. As a direct and proximate result of defendants' unlawful conduct, Arizona
6 Plaintiff and members of the Arizona Indirect Purchaser Class have been injured in their business
7 and property and are threatened with further injury.

8 d. By reason of the foregoing, Defendants entered into agreements in restraint
9 of trade in violation of Arizona Revised Statutes §§ 44-1401, *et seq.* Accordingly, Arizona Plaintiff
10 and the members of the Arizona Indirect Purchaser Class seek all forms of relief available under
11 Arizona Revised Statutes §§ 44-1401, *et seq.*

12 418. California: By reason of the foregoing, Defendants have violated California
13 Business and Professions Code, §§ 16700, *et seq.* California Plaintiff on behalf of the California
14 Indirect Purchaser Class alleges as follows:

15 a. Defendants' contract, combination, trust or conspiracy was entered in,
16 carried out, effectuated and perfected mainly within the State of California, and Defendants'
17 conduct within California injured all members of the class throughout the United States. Therefore,
18 this claim for relief under California law is brought on behalf of the California Indirect Purchaser
19 Class.

20 b. Beginning at a time currently unknown to California Plaintiff, but at least as
21 early as January 1, 2004, and continuing thereafter at least up to the filing of this complaint,
22 Defendants and their co-conspirators entered into and engaged in a continuing unlawful trust in
23 restraint of the trade and commerce described above in violation of section 16720, California
24 Business and Professions Code. Defendants, and each of them, have acted in violation of section
25 16720 to fix, raise, stabilize, and maintain prices of, and allocate markets for ODDs at supra-
26 competitive levels.

27 c. The aforesaid violations of section 16720, California Business and
28 Professions Code, consisted, without limitation, of a continuing unlawful trust and concert of

1 action among the defendants and their co-conspirators, the substantial terms of which were to fix,
2 raise, maintain, and stabilize the prices of, and to allocate markets for ODDs.

3 d. For the purpose of forming and effectuating the unlawful trust, the
4 Defendants and their co-conspirators have done those things which they combined and conspired to
5 do, including but not in any way limited to the acts, practices and course of conduct set forth above
6 and the following: (1) fixing, raising, stabilizing, and pegging the price of ODDs; and (2) allocating
7 among themselves the production of ODDs.

8 e. The combination and conspiracy alleged herein has had, *inter alia*, the
9 following effects: (1) price competition in the sale of ODDs has been restrained, suppressed, and/or
10 eliminated in the State of California; (2) prices for ODDs and ODD Products have been fixed,
11 raised, stabilized, and pegged at artificially high, noncompetitive levels in the State of California;
12 and (3) those who purchased ODDs and ODD Products directly or indirectly from Defendants and
13 their co-conspirators have been deprived of the benefit of free and open competition.

14 f. As a direct and proximate result of Defendants' unlawful conduct, California
15 plaintiffs and the members of the California Indirect Purchaser Class have been injured in their
16 business and property in that they paid more for ODD Products than they otherwise would have
17 paid in the absence of Defendants' unlawful conduct. As a result of Defendants' violation of
18 Section 16720 of the California Business and Professions Code, California Plaintiff and the
19 California Indirect Purchaser Class seek treble damages and their cost of suit, including a
20 reasonable attorney's fee, pursuant to section 16750(a) of the California Business and Professions
21 Code.

22 419. District of Columbia: By reason of the foregoing, Defendants have violated District
23 of Columbia Code Annotated §§ 28-4501, *et seq.* District of Columbia Plaintiff on behalf of the
24 District of Columbia Indirect Purchaser Class alleges as follows:

25 a. Defendants' combinations or conspiracies had the following effects: (1)
26 price competition for ODDs was restrained, suppressed, and eliminated throughout the District of
27 Columbia; (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high
28 levels throughout the District of Columbia; (3) District of Columbia Plaintiff and members of the

1 District of Columbia Indirect Purchaser Class were deprived of free and open competition; and
2 (4) District of Columbia Plaintiff and members of the District of Columbia Indirect Purchaser Class
3 paid supra-competitive, artificially inflated prices for ODD Products.

4 b. During the Class Period, Defendants' illegal conduct substantially affected
5 District of Columbia commerce.

6 c. As a direct and proximate result of defendants' unlawful conduct, District of
7 Columbia Plaintiff and the District of Columbia Indirect Purchaser Class have been injured in their
8 business and property and are threatened with further injury.

9 d. By reason of the foregoing, Defendants have entered into agreements in
10 restraint of trade in violation of District of Columbia Code Annotated §§ 28-4502, *et seq.*
11 Accordingly, District of Columbia Plaintiff and the District of Columbia Indirect Purchaser Class
12 seek all forms of relief available under District of Columbia Code Annotated §§ 28-4503, *et seq.*

13 420. Hawaii: By reason of the foregoing, Defendants have violated Hawaii Revised
14 Statutes, §§ 480-1, *et seq.* Hawaii Plaintiff on behalf of the Hawaii Indirect Purchaser Class alleges
15 as follows:

16 a. Defendants' combinations or conspiracies had the following effects: (1)
17 price competition for ODDs was restrained, suppressed, and eliminated throughout Hawaii; (2)
18 prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels throughout
19 Hawaii; (3) Hawaii Plaintiff and members of the Hawaii Indirect Purchaser Class were deprived of
20 free and open competition; and (4) Hawaii Plaintiff and members of the Hawaii Indirect Purchaser
21 Class paid supra-competitive, artificially inflated prices for ODD Products.

22 b. During the Class Period, Defendants' illegal conduct substantially affected
23 Hawaii commerce.

24 c. As a direct and proximate result of Defendants' unlawful conduct, Hawaii
25 Plaintiff and members of the Hawaii Indirect Purchaser Class have been injured in their business
26 and property and are threatened with further injury;

27 d. By reason of the foregoing, Defendants entered into agreements in restraint
28 of trade in violation of Hawaii Revised Statutes §§ 480-1, *et seq.* Accordingly, Hawaii Plaintiff and

1 the members of the Hawaii Indirect Purchaser Class seek all forms of relief available under Hawaii
2 Revised Statutes §§ 480-1, *et seq.*

3 421. Kansas: By reason of the foregoing, Defendants have violated Kansas Statutes,
4 §§ 50-101, *et seq.* Kansas Plaintiff on behalf of the Kansas Indirect Purchaser Class alleges as
5 follows:

6 a. Defendants' combinations or conspiracies had the following effects:
7 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Kansas; (2)
8 prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels throughout
9 Kansas; (3) Kansas Plaintiff and the Kansas Indirect Purchaser Class were deprived of free and
10 open competition; and (4) Kansas Plaintiff and the Kansas Indirect Purchaser Class paid supra-
11 competitive, artificially inflated prices for ODD Products.

12 b. During the Class Period, Defendants' illegal conduct substantially affected
13 Kansas commerce.

14 c. As a direct and proximate result of Defendants' unlawful conduct, Kansas
15 Plaintiff and the Kansas Indirect Purchaser Class have been injured in their business and property
16 and are threatened with further injury.

17 d. By reason of the foregoing, Defendants have entered into agreements in
18 restraint of trade in violation of Kansas Statutes §§ 50-101, *et seq.* Accordingly, Kansas Plaintiff
19 and the Kansas Indirect Purchaser Class seek all forms of relief available under Kansas Statutes
20 §§ 50-101, *et seq.*

21 422. Maine: By reason of the foregoing, Defendants have violated the Maine Revised
22 Statutes, 10 M.R.S. §§ 1101, *et seq.* Maine Plaintiff on behalf of the Maine Indirect Purchaser
23 Class alleges as follows:

24 a. Defendants' combinations or conspiracies had the following effects:
25 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Maine; (2)
26 prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels throughout
27 Maine; (3) Maine Plaintiff and the Maine Indirect Purchaser Class were deprived of free and open
28

1 competition; and (4) Maine Plaintiff and the Maine Indirect Purchaser Class paid supra-
2 competitive, artificially inflated prices for ODD Products.

3 b. During the Class Period, Defendants' illegal conduct substantially affected
4 Maine commerce.

5 c. As a direct and proximate result of Defendants' unlawful conduct, Maine
6 Plaintiff and the Maine Indirect Purchaser Class have been injured in their business and property
7 and are threatened with further injury.

8 d. By reason of the foregoing, Defendants have entered into agreements in
9 restraint of trade in violation of Maine Revised Statutes 10, §§ 1101, *et seq.* Accordingly, Maine
10 Plaintiff and the Maine Indirect Purchaser Class seek all relief available under Maine Revised
11 Statutes 10, §§ 1101, *et seq.*

12 423. Michigan: By reason of the foregoing, Defendants have violated Michigan
13 Compiled Laws §§ 445.773, *et seq.* Michigan Plaintiff on behalf of the Michigan Indirect
14 Purchaser Class alleges as follows:

15 a. Defendants' combinations or conspiracies had the following effects:
16 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Michigan;
17 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
18 throughout Michigan; (3) Michigan Plaintiff and the Michigan Indirect Purchaser Class were
19 deprived of free and open competition; and (4) Michigan Plaintiff and the Michigan Indirect
20 Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

21 b. During the Class Period, Defendants' illegal conduct substantially affected
22 Michigan commerce.

23 c. As a direct and proximate result of Defendants' unlawful conduct, Michigan
24 Plaintiff and the Michigan Indirect Purchaser Class have been injured in their business and
25 property and are threatened with further injury.

26 d. By reason of the foregoing, Defendants have entered into agreements in
27 restraint of trade in violation of Michigan Compiled Laws §§ 445.773, *et seq.* Accordingly,
28

1 Michigan Plaintiff and the Michigan Indirect Purchaser Class seek all relief available under
2 Michigan Compiled Laws §§ 445.73, *et seq.*

3 424. Minnesota: By reason of the foregoing, Defendants have violated Minnesota
4 Statutes §§ 325D.49, *et seq.* Minnesota Plaintiff on behalf of the Minnesota Indirect Purchaser
5 Class alleges as follows:

6 a. Defendants' combinations or conspiracies had the following effects:
7 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Minnesota;
8 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
9 throughout Minnesota; (3) Minnesota Plaintiff and the Minnesota Indirect Purchaser Class were
10 deprived of free and open competition; and (4) Minnesota Plaintiff and the Minnesota Indirect
11 Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

12 b. During the Class Period, Defendants' illegal conduct substantially affected
13 Minnesota commerce.

14 c. As a direct and proximate result of Defendants' unlawful conduct,
15 Minnesota Plaintiff and the Minnesota Indirect Purchaser Class have been injured in their business
16 and property and are threatened with further injury.

17 d. By reason of the foregoing, Defendants have entered into agreements in
18 restraint of trade in violation of Minnesota Statutes §§ 325D.49, *et seq.* Accordingly, Minnesota
19 Plaintiff and the Minnesota Indirect Purchaser Class seek all relief available under Minnesota
20 Statutes §§ 325D.49, *et seq.*

21 425. Nebraska: By reason of the foregoing, Defendants have violated Nebraska Revised
22 Statutes §§ 59-801, *et seq.* Nebraska Plaintiff on behalf of the Nebraska Indirect Purchaser Class
23 alleges as follows:

24 a. Defendants' combinations or conspiracies had the following effects:
25 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Nebraska;
26 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
27 throughout Nebraska; (3) Nebraska Plaintiff and the Nebraska Indirect Purchaser Class were
28

1 deprived of free and open competition; and (4) Nebraska Plaintiff and the Nebraska Indirect
2 Purchaser Class paid supra-competitive, artificially inflated prices for ODD products.

3 b. During the Class Period, Defendants' illegal conduct substantially affected
4 Nebraska commerce.

5 c. As a direct and proximate result of Defendants' unlawful conduct, Nebraska
6 Plaintiff and the Nebraska Indirect Purchaser Class have been injured in their business and property
7 and are threatened with further injury.

8 d. By reason of the foregoing, Defendants have entered into agreements in
9 restraint of trade in violation Nebraska Revised Statutes §§ 59-801, *et seq.* Accordingly, Nebraska
10 Plaintiff and the Nebraska Indirect Purchaser Class seek all relief available under Nebraska
11 Revised Statutes §§ 59-801, *et seq.*

12 426. Nevada: By reason of the foregoing, Defendants have violated Nevada Revised
13 Statutes §§ 598A.010, *et seq.* Nevada Plaintiff on behalf of the Nevada Indirect Purchaser Class
14 alleges as follows:

15 a. Defendants' combinations or conspiracies had the following effects:
16 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Nevada; (2)
17 prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels throughout
18 Nevada; (3) Nevada Plaintiff and the Nevada Indirect Purchaser Class were deprived of free and
19 open competition; and (4) Nevada Plaintiff and the Nevada Indirect Purchaser Class paid supra-
20 competitive, artificially inflated prices for ODD products.

21 b. During the Class Period, Defendants' illegal conduct substantially affected
22 Nevada commerce.

23 c. As a direct and proximate result of Defendants' unlawful conduct, Nevada
24 Plaintiff and the Nevada Indirect Purchaser Class have been injured in their business and property
25 and are threatened with further injury.

26 d. By reason of the foregoing, Defendants have entered into agreements in
27 restraint of trade in violation of Nevada Revised Statutes §§ 598A.010, *et seq.* Accordingly,
28

1 Nevada Plaintiff and the Nevada Indirect Purchaser Class seek all relief available under Nevada
2 Revised Statutes §§ 598A.010, *et seq.*

3 427. New Hampshire: By reason of the foregoing, Defendants have violated New
4 Hampshire Revised Statutes §§ 356:1, *et seq.* New Hampshire Plaintiff on behalf of the New
5 Hampshire Indirect Purchaser Class alleges as follows:

6 a. Defendants' combinations or conspiracies had the following effects:
7 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout New
8 Hampshire; (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high
9 levels throughout New Hampshire; (3) New Hampshire Plaintiff and the New Hampshire Indirect
10 Purchaser Class were deprived of free and open competition; and (4) New Hampshire Plaintiff and
11 the New Hampshire Indirect Purchaser Class paid supra-competitive, artificially inflated prices for
12 ODD Products.

13 b. During the Class Period, Defendants' illegal conduct substantially affected
14 New Hampshire commerce.

15 c. As a direct and proximate result of Defendants' unlawful conduct, New
16 Hampshire Plaintiff and the New Hampshire Indirect Purchaser Class have been injured in their
17 business and property and are threatened with further injury.

18 d. By reason of the foregoing, Defendants have entered into agreements in
19 restraint of trade in violation of New Hampshire Revised Statutes §§ 356:1, *et seq.* Accordingly,
20 New Hampshire Plaintiff and the New Hampshire Indirect Purchaser Class seek all relief available
21 under New Hampshire Revised Statutes §§ 356:1, *et seq.*

22 428. New Mexico: By reason of the foregoing, Defendants have violated New Mexico
23 Statutes §§ 57-1-1, *et seq.* New Mexico Plaintiff on behalf of the New Mexico Indirect Purchaser
24 Class alleges as follows:

25 a. Defendants' combinations or conspiracies had the following effects:
26 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout New
27 Mexico; (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
28 throughout New Mexico; (3) New Mexico Plaintiff and the New Mexico Indirect Purchaser Class

1 were deprived of free and open competition; and (4) New Mexico Plaintiff and the New Mexico
2 Indirect Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

3 b. During the Class Period, Defendants' illegal conduct substantially affected
4 New Mexico commerce.

5 c. As a direct and proximate result of Defendants' unlawful conduct, New
6 Mexico Plaintiff and the New Mexico Indirect Purchaser Class have been injured in their business
7 and property and are threatened with further injury.

8 d. By reason of the foregoing, Defendants have entered into agreements in
9 restraint of trade in violation of New Mexico Statutes §§ 57-1-1, *et seq.* Accordingly, New Mexico
10 Plaintiff and the New Mexico Indirect Purchaser Class seek all relief available under New Mexico
11 Statutes §§ 57-1-1, *et seq.*

12 429. New York: By reason of the foregoing, Defendants have violated New York
13 General Business Laws §§ 340, *et seq.* New York Plaintiff on behalf of the New York Indirect
14 Purchaser Class alleges as follows:

15 a. Defendants' combinations or conspiracies had the following effects:
16 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout New York;
17 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
18 throughout New York; (3) New York Plaintiff and the New York Indirect Purchaser Class were
19 deprived of free and open competition; and (4) New York Plaintiff and the New York Indirect
20 Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

21 b. During the Class Period, Defendants' illegal conduct substantially affected
22 New York commerce.

23 c. As a direct and proximate result of Defendants' unlawful conduct, New
24 York Plaintiff and the New York Indirect Purchaser Class have been injured in their business and
25 property and are threatened with further injury.

26 d. By reason of the foregoing, Defendants have entered into agreements in
27 restraint of trade in violation of New York General Business Laws §§ 340, *et seq.* Accordingly,
28

1 New York Plaintiff and the New York Indirect Purchaser Class seek all relief available under New
2 York General Business Laws §§ 340, *et seq.*

3 430. North Carolina: By reason of the foregoing, Defendants have violated North
4 Carolina General Statutes §§ 75-1, *et seq.* North Carolina Plaintiff on behalf of the North Carolina
5 Indirect Purchaser Class alleges as follows:

6 a. Defendants' combinations or conspiracies had the following effects:
7 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout North
8 Carolina; (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high
9 levels throughout North Carolina; (3) North Carolina Plaintiff and the North Carolina Indirect
10 Purchaser Class were deprived of free and open competition; and (4) North Carolina Plaintiff and
11 the North Carolina Indirect Purchaser Class paid supra-competitive, artificially inflated prices for
12 ODD Products.

13 b. During the Class Period, Defendants' illegal conduct substantially affected
14 North Carolina commerce.

15 c. As a direct and proximate result of Defendants' unlawful conduct, North
16 Carolina Plaintiff and the North Carolina Indirect Purchaser Class have been injured in their
17 business and property and are threatened with further injury.

18 d. By reason of the foregoing, Defendants have entered into agreements in
19 restraint of trade in violation of North Carolina General Statutes §§ 75-1, *et seq.* Accordingly,
20 North Carolina Plaintiff and the North Carolina Indirect Purchaser Class seek all relief available
21 under North Carolina General Statutes §§ 75-1, *et seq.*

22 431. Oregon: By reason of the foregoing, Defendants have violated Oregon Revised
23 Statutes §§ 646.705, *et seq.* Oregon Plaintiffs on behalf of the Oregon Indirect Purchaser Class
24 allege as follows:

25 a. Defendants' combinations or conspiracies had the following effects:
26 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Oregon; (2)
27 prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels throughout
28 Oregon; (3) Oregon Plaintiffs and the Oregon Indirect Purchaser Class were deprived of free and

1 open competition; and (4) Oregon Plaintiffs and the Oregon Indirect Purchaser Class paid supra-
2 competitive, artificially inflated prices for ODD Products.

3 b. During the Class Period, Defendants' illegal conduct had a substantial effect
4 on Oregon commerce.

5 c. As a direct and proximate result of Defendants' unlawful conduct, Oregon
6 Plaintiffs and the Oregon Indirect Purchaser Class have been injured in their business and property
7 and are threatened with further injury.

8 d. By reason of the foregoing, Defendants have entered into agreements in
9 restraint of trade in violation of Oregon Revised Statutes §§ 646.705, *et seq.* Accordingly, Oregon
10 Plaintiffs and the Oregon Indirect Purchaser Class seek all relief available under Oregon Revised
11 Statutes §§ 646.705, *et seq.*

12 432. Tennessee: By reason of the foregoing, Defendants have violated Tennessee Code
13 §§ 47-25-101, *et seq.* Tennessee Plaintiff on behalf of the Tennessee Indirect Purchaser Class
14 alleges as follows:

15 a. Defendants' combinations or conspiracies had the following effects:
16 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Tennessee;
17 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
18 throughout Tennessee; (3) Tennessee Plaintiff and the Tennessee Indirect Purchaser Class were
19 deprived of free and open competition; and (4) Tennessee Plaintiff and the Tennessee Indirect
20 Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

21 b. During the Class Period, Defendants' illegal conduct had a substantial effect
22 on Tennessee commerce as products containing ODD were sold in Tennessee.

23 c. As a direct and proximate result of Defendants' unlawful conduct,
24 Tennessee Plaintiff and the Tennessee Indirect Purchaser Class have been injured in their business
25 and property and are threatened with further injury.

26 d. By reason of the foregoing, Defendants have entered into agreements in
27 restraint of trade in violation of Tennessee Code §§ 47-25-101, *et seq.* Accordingly, Tennessee
28

1 Plaintiff and the Tennessee Indirect Purchaser Class seek all relief available under Tennessee Code
2 §§ 47-25-101, *et seq.*

3 433. Utah: By reason of the foregoing, Defendants have violated Utah Code §§ 76-10-
4 911, *et seq.* Utah Plaintiff on behalf of the Utah Indirect Purchaser Class alleges as follows:

5 a. Defendants' combinations or conspiracies had the following effects:
6 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Utah; (2)
7 prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels throughout
8 Utah; (3) Utah Plaintiff and the Utah Indirect Purchaser Class were deprived of free and open
9 competition; and (4) Utah Plaintiff and the Utah Indirect Purchaser Class paid supra-competitive,
10 artificially inflated prices for ODD Products.

11 b. During the Class Period, Defendants' illegal conduct had a substantial effect
12 on Utah commerce.

13 c. As a direct and proximate result of Defendants' unlawful conduct, Utah
14 Plaintiff and the Utah Indirect Purchaser Class have been injured in their business and property and
15 are threatened with further injury.

16 d. By reason of the foregoing, Defendants have entered into agreements in
17 restraint of trade in violation of violated Utah Code §§ 76-10-911, *et seq.* Accordingly, Utah
18 Plaintiff and the Utah Indirect Purchaser Class seek all relief available under violated Utah Code
19 §§ 76-10-911, *et seq.*

20 434. Vermont: By reason of the foregoing, Defendants have violated Vermont Stat. Ann.
21 9 §§ 2453, *et seq.* Vermont Plaintiff on behalf of the Vermont Indirect Purchaser Class alleges as
22 follows:

23 a. Defendants' combinations or conspiracies had the following effects:
24 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Vermont;
25 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
26 throughout Vermont; (3) Vermont Plaintiff and the Vermont Indirect Purchaser Class were
27 deprived of free and open competition; and (4) Vermont Plaintiff and the Vermont Indirect
28 Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

1 b. During the Class Period, Defendants' illegal conduct had a substantial effect
2 on Vermont commerce.

3 c. As a direct and proximate result of Defendants' unlawful conduct, Vermont
4 Plaintiff and the Vermont Indirect Purchaser Class have been injured in their business and property
5 and are threatened with further injury.

6 d. By reason of the foregoing, Defendants have entered into agreements in
7 restraint of trade in violation of Vermont Stat. Ann. 9 §§ 2453, *et seq.* Accordingly, Vermont
8 Plaintiff and the Vermont Indirect Purchaser Class seek all relief available under Vermont Stat.
9 Ann. 9 §§ 2453, *et seq.*

10 435. Wisconsin: By reason of the foregoing, Defendants have violated Wisconsin
11 Statutes §§ 133.01, *et seq.* Wisconsin Plaintiff on behalf of the Wisconsin Indirect Purchaser Class
12 alleges as follows:

13 a. Defendants' combinations or conspiracies had the following effects:
14 (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Wisconsin;
15 (2) prices for ODDs were raised, fixed, maintained and stabilized at artificially high levels
16 throughout Wisconsin; (3) Wisconsin Plaintiff and the Wisconsin Indirect Purchaser Class were
17 deprived of free and open competition; and (4) Wisconsin Plaintiff and the Wisconsin Indirect
18 Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

19 b. During the Class Period, Defendants' illegal conduct had a substantial effect
20 on Wisconsin commerce.

21 c. As a direct and proximate result of Defendants' unlawful conduct,
22 Wisconsin Plaintiff and the Wisconsin Indirect Purchaser Class have been injured in their business
23 and property and are threatened with further injury.

24 d. By reason of the foregoing, Defendants have entered into agreements in
25 restraint of trade in violation of Wisconsin Statutes §§ 133.01, *et seq.* Accordingly, Wisconsin
26 Plaintiff and the Wisconsin Indirect Purchaser Class seek all relief available under Wisconsin
27 Statutes §§ 133.01, *et seq.*

FIFTH CLAIM FOR RELIEF
(Violations of State Consumer Protection and Unfair Competition Laws)

436. Indirect Purchaser Plaintiffs incorporate by reference the allegations in the above paragraphs as if fully set forth herein.

437. In the event that the Court does not apply California law on a nationwide basis, Indirect Purchaser Plaintiffs allege the following violations of state consumer protection and unfair competition laws in the alternative.

438. Defendants engaged in unfair competition or unfair, unconscionable, deceptive or fraudulent acts or practices in violation of the state consumer protection and unfair competition statutes listed below.

439. Florida: By reason of the foregoing, Defendants have violated the Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. §§ 501.201, *et seq.* Florida Plaintiff on behalf of the Florida Indirect Purchaser Class alleges as follows:

a. Defendants' unlawful conduct had the following effects: (1) price competition for ODDs was restrained, suppressed, and eliminated throughout Florida; (2) prices for ODDs were raised, fixed, maintained, and stabilized at artificially high levels throughout Florida; (3) Florida Plaintiff and the Florida Indirect Purchaser Class were deprived of free and open competition; and (4) Florida Plaintiff and the Florida Indirect Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

b. During the Class Period, Defendants' illegal conduct substantially affected Florida commerce and consumers.

c. As a direct and proximate result of defendants' unlawful conduct, Florida Plaintiff and the Florida Indirect Purchaser Class have been injured and are threatened with further injury.

d. Defendants have engaged in unfair competition or unfair or deceptive acts or practices in violation of Fla. Stat. §§ 501.201, *et seq.*, and, accordingly, Florida Plaintiff and the Florida Indirect Purchaser Class seek all relief available under that statute.

1 440. Massachusetts: By reason of the foregoing, Defendants have violated the
2 Massachusetts Consumer and Business Protection Act, M.G.L. c. 93A, § 1, *et seq.* Massachusetts
3 Plaintiffs on behalf of the Massachusetts Indirect Purchaser Class allege as follows:

4 a. Defendants were engaged in trade or commerce as defined by M.G.L.
5 c. 93A, § 1.

6 b. Defendants agreed to, and did in fact, act in restraint of trade or commerce
7 in a market which includes Massachusetts, by affecting, fixing, controlling and/or maintaining at
8 artificial and noncompetitive levels, the prices at which ODDs were sold, distributed, or obtained
9 in Massachusetts and took efforts to conceal their agreements from the Massachusetts Plaintiffs
10 and members of the Massachusetts Indirect Purchaser Class.

11 c. Defendants' unlawful conduct had the following effects: (1) price
12 competition for ODDs was restrained, suppressed, and eliminated throughout Massachusetts; (2)
13 the prices of ODDs were raised, fixed, maintained, and stabilized at artificially high levels
14 throughout Massachusetts; (3) Massachusetts Plaintiffs and members of the Massachusetts
15 Indirect Purchaser Class were deprived of free and open competition; and (4) Massachusetts
16 Plaintiffs and members of the Massachusetts Indirect Purchaser Class paid supra-competitive,
17 artificially inflated prices for ODDs and ODD Products.

18 d. As a direct and proximate result of defendants' unlawful conduct,
19 Massachusetts Plaintiffs and members of the Massachusetts Indirect Purchaser Class were injured
20 and are threatened with further injury.

21 e. Each of the Defendants or their representatives have been served with a
22 demand letter in accordance with M.G.L. c. 93A, § 1, or such service of a demand letter was
23 unnecessary due to the defendant not maintaining a place of business within the Commonwealth
24 of Massachusetts or not keeping assets within the Commonwealth. More than thirty days has
25 passed since such demand letters were served, and each Defendant served has failed to make a
26 reasonable settlement offer.

27 f. By reason of the foregoing, Defendants engaged in unfair competition and
28 unfair or deceptive acts or practices, in violation of M.G.L. c. 93A, § 2. Defendants' and their co-

1 conspirators' violations of Chapter 93A were knowing or willful, entitling the Massachusetts
2 Plaintiff and the Massachusetts Indirect Purchaser Class to multiple damages.

3 441. Missouri: By reason of the foregoing, Defendants have violated Missouri's
4 Merchandising Practices Act, specifically Mo. Rev. Stat. § 407.020. Missouri Plaintiff on behalf of
5 the Missouri Indirect Purchaser Class allege as follows:

6 a. Missouri Plaintiff and members of the Missouri Indirect Purchaser Class
7 purchased ODDs for personal, family, or household purposes.

8 b. Defendants engaged in the conduct described herein in connection with the
9 sale of ODD in trade or commerce in a market that includes Missouri.

10 c. Defendants agreed to, and did in fact affect, fix, control, and/or maintain, at
11 artificial and non-competitive levels, the prices at which ODDs were sold, distributed, or obtained
12 in Missouri, which conduct constituted unfair practices in that it was unlawful under federal and
13 state law, violated public policy, was unethical, oppressive and unscrupulous, and caused
14 substantial injury to Missouri Plaintiff and the members of the Missouri Indirect Purchaser Class.

15 d. Defendants concealed, suppressed, and omitted to disclose material facts to
16 Missouri Plaintiff and the members of the Missouri Indirect Purchaser Class concerning
17 defendants' unlawful activities and artificially inflated prices for ODD. The concealed,
18 suppressed, and omitted facts would have been important to Missouri Plaintiff and the members of
19 the Missouri Indirect Purchaser Class as they related to the cost of ODD they purchased.

20 e. Defendants misrepresented the real cause of price increases and/or the
21 absence of price reductions in ODDs by making public statements that were not in accord with the
22 facts.

23 f. Defendants' statements and conduct concerning the price of ODDs were
24 deceptive as they had the tendency or capacity to mislead Missouri Plaintiff and the members of
25 the Missouri Indirect Purchaser Class to believe that they were purchasing ODDs and ODD
26 Products at prices established by a free and fair market. Defendants' unlawful conduct had the
27 following effects: (1) ODD price competition was restrained, suppressed, and eliminated
28 throughout Missouri; (2) ODD prices were raised, fixed, maintained, and stabilized at artificially

1 high levels throughout Missouri; (3) Missouri Plaintiff and members of the Missouri Indirect
 2 Purchaser Class were deprived of free and open competition; and (4) Missouri Plaintiff and
 3 members of the Missouri Indirect Purchaser Class paid supra-competitive, artificially inflated
 4 prices for ODD Products.

5 g. The foregoing acts and practices constituted unlawful practices in violation
 6 of the Missouri Merchandising Practices Act.

7 h. As a direct and proximate result of the above-described unlawful practices,
 8 Missouri Plaintiff and members of the Missouri Indirect Purchaser Class suffered ascertainable
 9 loss of money or property.

10 i. Accordingly, Missouri Plaintiff and members of the Missouri Indirect
 11 Purchaser Class seek all relief available under Missouri's Merchandising Practices Act,
 12 specifically Mo. Rev. Stat. § 407.020, which prohibits "the act, use or employment by any person
 13 of any deception, fraud, false pretense, false promise, misrepresentation, unfair practice or the
 14 concealment, suppression, or omission of any material fact in connection with the sale or
 15 advertisement of any merchandise in trade or commerce," as further interpreted by the Missouri
 16 Code of State Regulations, 15 CSR 60-7.010, *et seq.*, 15 CSR 60-8.010, *et seq.*, and 15 CSR 60-
 17 9.010, *et seq.*, and Mo. Rev. Stat. § 407.025, which provides for the relief sought in this count.

18 442. Montana: By reason of the foregoing, Defendants have violated Montana's Unfair
 19 Trade Practices and Consumer Protection Act of 1970, Mont. Code, §§ 30-14-201, *et seq.* Montana
 20 Plaintiff on behalf of the Montana Indirect Purchaser Class alleges as follows:

21 a. Defendants' unlawful conduct had the following effects: (1) ODD price
 22 competition was restrained, suppressed, and eliminated throughout Montana; (2) ODD prices were
 23 raised, fixed, maintained, and stabilized at artificially high levels throughout Montana; (3)
 24 Montana Plaintiff and the Montana Indirect Purchaser Class were deprived of free and open
 25 competition; and (4) Montana Plaintiff and the Montana Indirect Purchaser Class paid supra-
 26 competitive, artificially inflated prices for ODD Products.

27 b. During the Class Period, Defendants' illegal conduct substantially affected
 28 Montana commerce and consumers.

1 c. As a direct and proximate result of Defendants' unlawful conduct, Montana
2 Plaintiff and the Montana Indirect Purchaser Class have been injured and are threatened with
3 further injury.

4 d. Defendants have engaged in unfair competition or unfair or deceptive acts
5 or practices in violation of Montana's Unfair Trade Practices and Consumer Protection Act, Mont.
6 Code, §§ 30-14-201, *et seq.* and, accordingly, Montana Plaintiff and the Montana Indirect
7 Purchaser Class seek all relief available under that statute.

8 443. Nebraska: By reason of the foregoing, Defendants have violated Nebraska's
9 Consumer Protection Act, Neb. Rev. Stat. §§ 59-1601, *et seq.* Nebraska Plaintiff on behalf of the
10 Nebraska Indirect Purchaser Class alleges as follows:

11 a. Defendants' unlawful conduct had the following effects: (1) ODD price
12 competition was restrained, suppressed, and eliminated throughout Nebraska; (2) ODD prices
13 were raised, fixed, maintained, and stabilized at artificially high levels throughout Nebraska;
14 (3) Nebraska Plaintiff and the Nebraska Indirect Purchaser Class were deprived of free and open
15 competition; and (4) Nebraska Plaintiff and the Nebraska Indirect Purchaser Class paid supra-
16 competitive, artificially inflated prices for ODD Products.

17 b. During the Class Period, Defendants' illegal conduct substantially affected
18 Nebraska commerce and consumers.

19 c. As a direct and proximate result of Defendants' unlawful conduct, Nebraska
20 Plaintiff and the Nebraska Indirect Purchaser Class have been injured and are threatened with
21 further injury.

22 d. Defendants' actions and conspiracy have had a substantial impact on the
23 public interests of Nebraska and its residents.

24 e. Defendants have engaged in unfair competition or unfair or deceptive acts
25 or practices in violation of Nebraska's Consumer Protection Act, Neb. Rev. Stat. §§ 59-1601, *et*
26 *seq.* and, accordingly, Nebraska Plaintiff and the Nebraska Indirect Purchaser Class seek all relief
27 available under that statute.

1 444. New Hampshire: By reason of the foregoing, Defendants have violated New
2 Hampshire's Consumer Protection Act, N.H. Rev. Stat. Ann. §§ 358-A:2, *et seq.* New Hampshire
3 Plaintiff on behalf of the New Hampshire Indirect Purchaser Class alleges as follows:

4 a. Defendants' unlawful conduct had the following effects: (1) ODD price
5 competition was restrained, suppressed, and eliminated throughout New Hampshire; (2) ODD
6 prices were raised, fixed, maintained, and stabilized at artificially high levels throughout New
7 Hampshire; (3) New Hampshire Plaintiff and the New Hampshire Indirect Purchaser Class were
8 deprived of free and open competition; and (4) New Hampshire Plaintiff and the New Hampshire
9 Indirect Purchaser Class paid supra-competitive, artificially inflated prices for ODD Products.

10 b. During the Class Period, Defendants' illegal conduct substantially affected
11 New Hampshire commerce and consumers.

12 c. As a direct and proximate result of Defendants' unlawful conduct, New
13 Hampshire Plaintiff and the New Hampshire Indirect Purchaser Class have been injured and are
14 threatened with further injury.

15 d. Defendants' actions and conspiracy have had a substantial impact on the
16 public interests of New Hampshire and its residents.

17 e. Defendants have engaged in unfair competition or unfair or deceptive acts
18 or practices in violation of New Hampshire Consumer Protection Act, N.H. Rev. Stat. Ann.
19 §§ 358-A:2, *et seq.* and, accordingly, New Hampshire Plaintiff and the New Hampshire Indirect
20 Purchaser Class seek all relief available under that statute.

21 445. New York: By reason of the foregoing, Defendants have violated New York's
22 General Business Law, N.Y. Gen. Bus. Law § 349, *et seq.* New York Plaintiff on behalf of the
23 New York Indirect Purchaser Class alleges as follows:

24 a. Defendants agreed to, and did in fact, act in restraint of trade or commerce
25 by affecting, fixing, controlling and/or maintaining, at artificial and noncompetitive levels, the
26 prices at which ODD was sold, distributed or obtained in New York and took efforts to conceal
27 their agreements from New York Plaintiff and the New York Indirect Purchaser Class.

1 b. The conduct of the Defendants described herein constitutes consumer-
2 oriented deceptive acts or practices within the meaning of N.Y. Gen. Bus. Law § 349, which
3 resulted in consumer injury and broad adverse impact on the public at large, and harmed the
4 public interest of New York State in an honest marketplace in which economic activity is
5 conducted in a competitive manner.

6 c. Defendants made certain statements about ODDs that they knew would be
7 seen by New York residents and these statements either omitted material information that
8 rendered the statements they made materially misleading or affirmatively misrepresented the real
9 cause of price increases for ODDs.

10 d. Defendants' unlawful conduct had the following effects: (1) ODD price
11 competition was restrained, suppressed, and eliminated throughout New York; (2) ODD prices
12 were raised, fixed, maintained, and stabilized at artificially high levels throughout New York; (3)
13 New York Plaintiff and the New York Indirect Purchaser Class were deprived of free and open
14 competition; and (4) New York Plaintiff and the New York Indirect Purchaser Class paid supra-
15 competitive, artificially inflated prices for ODD Products.

16 e. During the Class Period, Defendants' illegal conduct substantially affected
17 New York commerce and consumers.

18 f. During the Class Period, each of the Defendants named herein, directly, or
19 indirectly and through affiliates they dominated and controlled, manufactured, sold and/or
20 distributed ODD products in New York.

21 g. New York Plaintiff and the New York Indirect Purchaser Class seek actual
22 damages for their injuries caused by these violations in an amount to be determined at trial and are
23 threatened with further injury. Without prejudice to their contention that Defendants' unlawful
24 conduct was willful and knowing, New York Plaintiff and the New York Indirect Purchaser Class
25 do not seek in this action to have those damages trebled pursuant to N.Y. Gen. Bus. Law § 349(h).

26 446. Vermont: By reason of the foregoing, Defendants have violated Vermont's
27 Consumer Fraud Act, 9 Vt. Stat. Ann. § 2451, *et seq.* Vermont Plaintiff on behalf of the Vermont
28 Indirect Purchaser Class alleges as follows:

1 a. Defendants agreed to, and did in fact, act in restraint of trade or commerce
2 in a market that includes Vermont, by affecting, fixing, controlling, and/or maintaining, at
3 artificial and noncompetitive levels, the prices at which ODDs were sold, distributed, or obtained
4 in Vermont.

5 b. Defendants deliberately failed to disclose material facts to Vermont
6 Plaintiff and the Vermont Indirect Purchaser Class concerning Defendants' unlawful activities and
7 artificially inflated prices for ODD Products. Defendants owed a duty to disclose such facts, and
8 considering the relative lack of sophistication of the average, non-business consumer, Defendants
9 breached that duty by their silence. Defendants misrepresented to all consumers during the Class
10 Period that Defendants' ODD prices were competitive and fair.

11 c. Defendants' unlawful conduct had the following effects: (1) ODD price
12 competition was restrained, suppressed, and eliminated throughout Vermont; (2) ODD prices were
13 raised, fixed, maintained, and stabilized at artificially high levels throughout Vermont; (3)
14 Vermont Plaintiff and the Vermont Indirect Purchaser Class were deprived of free and open
15 competition; and (4) Vermont Plaintiff and the Vermont Indirect Purchaser Class paid supra-
16 competitive, artificially inflated prices for ODD Products.

17 d. As a direct and proximate result of the Defendants' violations of law,
18 Vermont Plaintiff and the Vermont Indirect Purchaser Class suffered an ascertainable loss of
19 money or property as a result of Defendants' use or employment of unconscionable and deceptive
20 commercial practices as set forth above. That loss was caused by Defendants' willful and
21 deceptive conduct, as described herein.

22 e. Defendants' deception, including their affirmative misrepresentations and
23 omissions concerning the price of ODD Products, likely misled all consumers acting reasonably
24 under the circumstances to believe that they were purchasing ODD Products at prices born by a
25 free and fair market. Defendants' misleading conduct and unconscionable activities constitutes
26 unfair competition or unfair or deceptive acts or practices in violation of 9 Vt. Stat. Ann. § 2451,
27 *et seq.*, and, accordingly, Vermont Plaintiff and the Vermont Indirect Purchaser Class seek all
28 relief available under that statute.

1 **PRAYER FOR RELIEF**

2 WHEREFORE, Indirect Purchaser Plaintiffs pray that the Court enter judgment on their
3 behalf and on behalf of the Class herein, adjudging and decreeing that:

4 A. This action may proceed as a class action, with Indirect Purchaser Plaintiffs as the
5 designated Class Representatives and their counsel as Class Counsel;

6 B. Defendants have engaged in a contract, combination, and conspiracy in violation of
7 Section 1 of the Sherman Act (15 U.S.C. § 1), and that Indirect Purchaser Plaintiffs and the
8 Injunctive and State Classes have been injured in their businesses and property as a result of
9 Defendants' violations;

10 C. Indirect Purchaser Plaintiffs and the members of the State Classes recover damages
11 sustained by them, restitution or disgorgement, as provided by the state antitrust and consumer
12 protection laws, and that a joint and several judgment in favor of Indirect Purchaser Plaintiffs and
13 the State Classes be entered against the Defendants in an amount to be trebled in accordance with
14 such laws;

15 D. Defendants, their subsidiaries, affiliates, successors, transferees, assignees, and the
16 respective officers, directors, partners, agents, and employees thereof and all other persons acting
17 or claiming to act on their behalf be permanently enjoined and restrained from continuing and
18 maintaining the combination, conspiracy, or agreement alleged herein;

19 E. Indirect Purchaser Plaintiffs and the members of the State Classes be awarded pre-
20 judgment and post-judgment interest, and that such interest be awarded at the highest legal rate
21 from and after the date of service of the initial complaint in this action;

22 F. Indirect Purchaser Plaintiffs and the members of the Class recover their costs of this
23 suit, including reasonable attorneys' fees as provided by law; and

24 G. Indirect Purchaser Plaintiffs and the members of the Class receive such other or
25 further relief as may be just and proper.
26
27
28

JURY TRIAL DEMANDED

Indirect Purchaser Plaintiffs demand a trial by jury of all of the claims asserted in this complaint so triable.

DATED: September 16, 2013

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By /s/ Jeff D. Friedman
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CERTIFICATE OF SERVICE

I hereby certify that on September 16, 2013, I electronically filed the foregoing document using the CM/ECF system which will send notification of such filing to the e-mail addresses registered in the CM/ECF system, as denoted on the Electronic Mail Notice List, and I hereby certify that I have caused to be mailed a paper copy of the foregoing document via the United States Postal Service to the non-CM/ECF participants indicated on the Manual Notice List generated by the CM/ECF system.

/s/ Jeff D. Friedman
JEFF D. FRIEDMAN